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Government
Publications

North Pickering Community Development Project



DISCUSSION PAPER NO.1: INITIAL ASSUMPTIONS AND ISSUES

Ontario

North Pickering Community Development Team
Ministry of Treasury, Economics and
Intergovernmental Affairs

plantown consultants limited

September 1973

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Follows
Page 4

chapter one

INTRODUCTION

I. A NEW COMMUNITY AT NORTH PICKERING

On March 2, 1972, the Government of Ontario announced its intention to develop a New Community at North Pickering by acquiring a site of approximately 25,000 acres.

This announcement came as the culmination of several streams of activities at both the Provincial and Federal levels which are outlined more fully in an Appendix to this report. These included the following:

- A. Ongoing studies to develop action programs to initiate the implementation of the Toronto-Centred Region Concept;
- B. Investigation of the most appropriate location for a New Toronto Airport;
- C. Studies of the alternatives available for the restructuring of local governments within a regional government framework for the area east of Metropolitan Toronto; and
- D. An increasing recognition at the Federal and Provincial levels of the appropriateness of the establishment of new communities through governmental initiative as an effective means of solving many of the problems associated with the rapid and continuing growth of larger urban centres.

The announcement concerning the New Community was made concurrently with a joint announcement of the Governments of Ontario and Canada concerning the site for a new International Airport for the Toronto region. This reflected the desire of both governments to ensure that the Airport would be effectively integrated into the proposed urban structure east of Toronto. In that context, it was contemplated that the new community might have a population of between 150,000 to 200,000 by the turn of the century.

Hearings and studies to determine more precisely the nature, role, and rate of development of the New Toronto Airport are to be held. It must be noted, however, that regardless of the ultimate outcome of those deliberations by the Federal Government, it has been stated by the Government of Ontario that the New Community at North Pickering will proceed as one of the major steps in the implementation of the Toronto-Centred Region Plan.

II. THE PROVINCIAL PROJECT TEAM

When the Provincial Government made its announcement concerning the new community at North Pickering, it also mentioned the establishment of a full time implementation team. This team consists of a Director and full time staff which is linked to all relevant provincial ministries, agencies and departments in two ways; firstly, many of the senior staff members have been seconded for varying periods of time from the involved departments and agencies of the Provincial Government, and secondly, by means of a series of special committees and task forces including a Project Review Committee consisting of representatives of all provincial ministries.

The North Pickering Community Development Team consists of the Director, assisted by a Project Coordinator and a group of specialist coordinators responsible for the following aspects of the work program:

- A. Community Design
- B. Social Development
- C. Economic Development
- D. Environmental Planning
- E. Transportation Planning
- F. Services, Utilities and Communications Planning
- G. Municipal Government and Finance
- H. Community Liaison
- I. Land Acquisition.

Linkages to relevant federal ministries, departments and agencies are established primarily through the Project Director.

III. SELECTION OF CONSULTANTS

At the end of 1972, 13 major consulting firms or group of firms were invited to prepare written submissions outlining their organizational capability, qualifications and experience to assist the North Pickering Community Development Team in preparing a Plan for Development of the new community. The Project Team was assisted by an independent four member panel which assessed and ranked the proposals on the basis of written and oral presentations. The independent assessment and recommendations of the panel and Project Team led to the selection of Plantown Consultants Limited, a consortium of Canadian planning and engineering firms.

Plantown, which is based in Toronto, is a corporate entity established by the Giffels Group, The Proctor & Redfern Group, James F. MacLaren Limited, and Marshall, Macklin, Monaghan Ltd. It is undertaking its present assignment in association with P.S. Ross & Partners, James A. Murray, De Leuw Cather Canada Ltd., Ecoplans Ltd., D.M. Connor Development Services Ltd., Leisure Consultants, Johnson Sustromk Weinstein and Associates Limited, Dr. G.J. Theissen, and Llewelyn-Davies Weeks Associates.

Staff in these firms have extensive experience in the diverse aspects of community planning and are expected to meet the government's desire for innovative approaches to housing, environmental preservation, transportation and services to the new community.

Plantown has matched the organizational structure of the Provincial Project Team in order to be able to bring to bear the appropriate expertise required in each of the Coordination Areas outlined previously.

The Provincial and Plantown Team members have jointly evolved a plan formulation process and work program aimed at producing a Plan for Development by the end of 1974. Detailed design and construction of community facilities are expected to begin shortly thereafter and the first residential neighbourhoods are scheduled for occupancy in 1977. The plan formulation process is described more fully in Chapter Two of this document.

IV. GOALS AND OBJECTIVES OF THE PROJECT TEAM

Shortly after its formation, the Provincial Project Team set about enunciating goals and objectives that would provide guidelines for its work. An interim draft was prepared in December 1972 and is included in an Appendix to this report.

It indicates the intentions of the Project Team in preparing the Plan for Development and will be utilized as a point of departure in formulating the goals and objectives for the new community. Discussion Paper No. 2 will deal exclusively with that subject and will outline preliminary statements of goals and objectives for the new community which stem from and amplify those included in the Appendix.

chapter two

PLAN FORMULATION PROCESS

I. FORMULATING THE PLAN FOR DEVELOPMENT

The process for the formulation of the Plan for Development for the North Pickering New Community Project is depicted graphically in Figure No. 1. It consists of four major phases, each of which consists of several components as follows:

I - BASIS FOR THE PLAN

- A. Surveys, data collection, research and analysis
- B. Formulation of goals and objectives
- C. Preparation of preliminary concepts
- D. Evaluation of preliminary concepts and selection of limited number for further detailing

II - FORMULATION OF SELECTED COMMUNITY CONCEPT PLANS

- A. Gross detailing of selected community concept plans
- B. Evaluation of selected community concept plans
- C. Preparation of material for period of intensive governmental and public review

III - PLAN REVIEW, RE-EXAMINATION AND MODIFICATION

- A. Analysis of inputs from intensive governmental and public review process
- B. Modification of community concept plans
- C. Evaluation of modified concept plans and selection of plan for final detailing

IV - FINALIZATION OF PLAN FOR DEVELOPMENT

- A. Detailing of selected plan
- B. Examination of implementation alternatives
- C. Evaluation of implementation alternatives
- D. Production of the text and graphics for the plan for development.

north pickering community development project plan formulation process

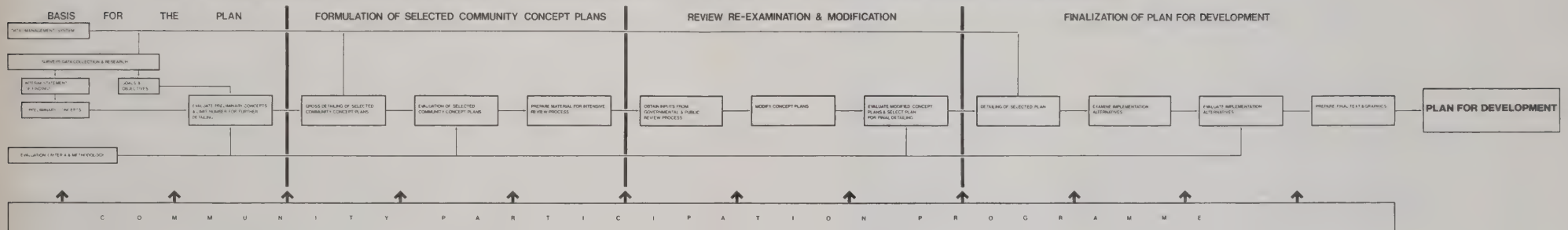


Figure1

The planning process has been devised to proceed progressively from the broadest range of possibilities through diminishing numbers of alternatives until a plan is selected for detailing as the Plan for Development of the New Community. In many ways, the process will be one of progressive refinement through repeated evaluation and selection procedures. This will facilitate incorporating in a responsive manner changing assumptions, factors, conditions or inputs arising at any point in time.

Attention has been focused to date on a series of surveys, data collection, research and analysis activities that will yield goals and objectives and result in the formulation of preliminary community design concepts. These, along with their evaluation, will provide the basis for the Plan for Development and all subsequent detailed work.

They have progressed to the stage where it is now possible to produce the interim statement of findings indicated on Figure No. 1 as a means of initiating dialogue between the Project Team and all interested parties.

II. INTENT OF DISCUSSION PAPERS

In starting work on this Project, the Provincial Government indicated its desire to have the Project Team develop vehicles for extensive public participation. The plan formulation process and detailed work program have been devised with that consideration in mind.

Two of the primary mechanisms that will be utilized will include the publication of Discussion Papers and Interim Reports along with a series of presentations and meetings at about monthly intervals.

The Discussion Papers will summarize various aspects of the work in order to present the findings to date, preliminary proposals and issues requiring resolution. The material in the Discussion Papers will NOT be a complete account of all work undertaken prior to their preparation. Rather, they will be summaries of material intended to provoke dialogue and discussion and to initiate a feedback loop between the Project Team and all external parties with interest in the project.

The more definitive summaries of the work will be presented in three Interim Reports and the final Plan for Development.

III. PROCESSING OF DISCUSSION PAPERS AND INTERIM REPORTS

The Discussion Papers and Interim Reports are intended to serve as instruments to establish a dialogue between the North Pickering Community Development Project Team and all interested parties. This will be achieved by the widespread distribution of these documents to all persons, groups, agencies or governmental bodies expressing an interest. When they are distributed these documents will present the results of the work of the Project Team for review at the individual, municipal and provincial levels.

The internal review process supplemented by a monthly participative planning program will provide the Project Team with reactions to the material in each Discussion Paper and Interim Report. These will be reviewed in subsequent documents to summarize the responses received and the way in which the Project Team has dealt with them. In this manner, a feedback loop will be established. This can only occur if in fact there is a response to the material presented. The Project Team, therefore, invites reaction to the material outlined herein to assist it in evolving a Plan for Development that is an accurate reflection of a participative planning process.

Written comments on this and all subsequent papers and reports should be sent to:

PUBLIC PARTICIPATION SECTION
THE NORTH PICKERING COMMUNITY DEVELOPMENT PROJECT
950 YONGE STREET - 6TH FLOOR
TORONTO, ONTARIO
M7A 1Y7

IV. CONTENTS OF DISCUSSION PAPERS AND INTERIM REPORTS

The review of this paper will perhaps be facilitated by an understanding of the subject matter of those that are to follow. The following list summarizes the titles of each of the eleven Discussion Papers as well as of the three Interim Reports. It shows the sequence in which Discussion Papers and Interim Reports will be prepared and indicates how the Interim Reports will summarize in a more complete manner the subject matter dealt with in the Discussion Papers that precede them.

- DISCUSSION PAPER NO. 1: INITIAL ASSUMPTIONS AND ISSUES
- DISCUSSION PAPER NO. 2: GOALS AND OBJECTIVES
- DISCUSSION PAPER NO. 3: PRELIMINARY COMMUNITY CONCEPTS
- DISCUSSION PAPER NO. 4: EVALUATION OF PRELIMINARY COMMUNITY CONCEPTS
- INTERIM REPORT I: THE BASIS FOR THE PLAN FOR DEVELOPMENT
- DISCUSSION PAPER NO. 5: SELECTED COMMUNITY CONCEPT PLANS
- DISCUSSION PAPER NO. 6: EVALUATION OF SELECTED COMMUNITY CONCEPT PLANS
- INTERIM REPORT II: ALTERNATIVE PLANS FOR THE NEW COMMUNITY AT NORTH PICKERING
- DISCUSSION PAPER NO. 7: SUMMARY OF THE REVIEW OF THE ALTERNATIVE PLANS
- DISCUSSION PAPER NO. 8: ALTERNATIVE PLANS RE-EXAMINATION AND MODIFICATION
- DISCUSSION PAPER NO. 9: EVALUATION OF ALTERNATIVE PLANS AND SELECTION OF PLAN FOR FINAL DETAILING
- INTERIM REPORT III: SELECTION OF THE PLAN FOR THE NEW COMMUNITY AT NORTH PICKERING
- DISCUSSION PAPER NO. 10: DETAILING OF THE PLAN FOR DEVELOPMENT
- DISCUSSION PAPER NO. 11: EVALUATION OF IMPLEMENTATION ALTERNATIVES
- FINAL REPORT: PLAN FOR DEVELOPMENT OF THE NEW COMMUNITY AT NORTH PICKERING

chapter three SCOPE OF CURRENT INVESTIGATIONS

I. DEFINING RELEVANT SOCIAL, ECONOMIC AND PHYSICAL FACTORS

Mention has been made of the fact that this document represents an interim statement of findings of the surveys, data collection, research and analyses being undertaken in each of the coordination areas. The current investigations are intended to define the relevant social, economic and physical factors that will influence the Plan for Development for the New Community at North Pickering.

The current investigations are being undertaken with the recognition that while construction of the community will be initiated in 1976, it will not likely be completed until about the end of the twentieth century and will, therefore, not reach maturity until the year 2010 or 2020. Initial studies, therefore, have attempted to define not only the current operable social, economic and physical factors, but also the nature of the change that can be expected in them over the years ahead.

The New Community will be brought into existence to satisfy the living needs of people. Paramount importance, therefore, has been attached to developing an understanding of the nature of contemporary urban man and the way in which his value system and life style is likely to change in the future.

Paralleling those considerations have been investigations of the current and emerging trends in meeting human needs in an institutional framework with respect to the determination of services and programs required and the most appropriate mechanisms for furnishing these.

The intent of the Toronto-Centred Region Concept is that the New Community at North Pickering be developed as an urban centre with employment opportunities available in balance with the resident population. Economic studies, therefore, have focused on the prospects for employment within the national, provincial and regional contexts in order to determine the possibilities available for the

establishment of a diverse employment base in the New Community. This work pays particular attention to the catalytic effect that the New Toronto Airport and the buoyant economic base of Metropolitan Toronto could have in shaping the nature of economic activities in the New Community and their rate of establishment. Particular attention is being focused on determining the types of employment and business activities for the New Community that are most compatible with and complementary to those that are projected for the Regional Municipality of Durham within which the New Community is primarily situated.

Work in the physical sphere involves several diverse avenues of investigation. Studies of the characteristics, attributes and limitations of the existing natural and man-made environment have been initiated and several monitoring programs will be conducted on an ongoing basis to yield information concerning changes over an extended time scale.

Existing and prospective regional transportation, services, utilities and communications networks are being documented and the current and emerging state of the art with respect to technological innovation in these spheres is being given special study.

New town experience is being carefully studied to determine features of success and failure that are of relevance to the design of a new community in Ontario. Special attention is being devoted to matters of housing, shopping, open space and urban form to establish policy and physical design responses that are most appropriate in relation to a variety of prognostications concerning human needs, life styles and emerging technology.

The studies to date have begun to define the opportunities, constraints, and options available for the Plan for Development of the New Community at North Pickering in social, economic and physical terms. Preliminary observations, initial assumptions and some of the more important issues arising from this work are outlined in Chapter Four.

II. THE NEXT STEP

Work is continuing in the areas outlined in the previous section to complete the background studies necessary to establish the basis for the Plan for Development. Attention in the immediate future will be devoted to refining the social, economic and physical perceptions and to defining broad goals and objectives for the New Community. Reaction to the material presented in this Paper will shape the direction of future work and influence its results. For that reason, all persons reading this Paper are urged to submit their written comments.

chapter four OPPORTUNITIES, CONSTRAINTS AND OPTIONS AVAILABLE

I. SOCIAL DEVELOPMENT

The material in Appendix C of this paper indicates that initial attention in the area of social development has been focused on the changing nature of urban man with respect to shifting values, family life styles and the problem of alienation and loneliness. In addition human development services have been examined to determine current and emerging approaches.

These studies give rise to many questions which will have to be answered to assist in the definition of the opportunities and constraints that will influence the range of options available in the formulation of a plan for social development for the New Community.

A. CHANGING NATURE OF URBAN MAN

1. Shifting Values

In examining the shifting values and attitudes of urban man emphasis has been placed on emergent trends rather than the documentation of traditional and existing characteristics as a means of provoking discussion about what the future may hold.

Trends which are presently clearly discernible include the following:

- a) Greater emphasis on individuality as opposed to societal or group concerns;
- b) Increasing equality in human relationships as regards, for example, men and women, parents and children, workers and management, and teachers and students;
- c) Increasing time available for and importance attached to leisure activities;
- d) Increasing emphasis on learning as a life-long experience to enhance living rather than as training for work;
- e) Increasing desire for direct participation in the decision-making process;

- f) A broadening of the territorial scope for the pursuit of common interests with others from an area of immediate contact to virtually a global scale;
- g) Increasing public awareness and concern for the preservation and conservation of the environment;
- h) A lessening of the emphasis on materialism and a shift from the notion of work as a virtuous activity in its own right to the importance of personally gratifying work experience; and
- i) An increase in the apparent search for meaning, identity and spiritual satisfaction.

2. Changing Family Life Styles

While the family will likely continue to be the basic socio-economic unit of Canadian society, there are many indications that it will be affected in its nature by a variety of emergent life styles.

The family is tending to be less self-sufficient and increasingly reliant on external sources for the self-fulfillment of its members. There is a discernible shift from a security orientation to one of freedom of action by the family members and it is not uncommon for children to depart from and then rejoin their families for varying lengths of time as they progress from youth to adulthood.

3. Alienation and Loneliness

A long recognized phenomenon associated with contemporary urban society is the feeling of alienation and loneliness. It has been conjectured that it arises as a result of an over-emphasis on individual freedom resulting in such a departure from group or societal values as to create a feeling of loss of security, loneliness, meaninglessness and despair.

4. Initial Social Issues and Planning Implications

The social phenomenon outlined in the preceding sections point out a variety of social issues and planning implications that can perhaps best be expressed as a series of questions. The Project Team is searching for their answers. It expects to be materially assisted by the responses it receives to this Discussion Paper.

- a) *Will the quest for greater freedom of individual expression and the tendency for greater equality in human relationships be carried to the point where the family unit ceases to be the basic component of society and is replaced by other social groupings? If so, what implications will this have on types of housing accommodation required? Will such trends if carried to their extreme aggravate the condition of alienation and loneliness to the point where specialized institutional mechanisms are required to evolve programs or construct physical facilities to cope with this phenomenon on a broad scale? Will such trends similarly imply the need for specialized approaches or facilities to maximize the opportunity for individual self-fulfillment or expression and assist in satisfying the need for individual privacy?*
- b) *Will the tendency for increasing leisure coupled with the broadening of communities of interest be carried to the point where there are severe implications on requirements for additional space, facilities and communications networks? Is there a likelihood that such trends could proceed to the point where time spent in leisure activities far outbalances time spent at work resulting in entirely different travel patterns and demands?*
- c) *Will the view that the pursuit of knowledge as a lifelong process, coupled with changing attitudes toward the importance of meaningful and personally gratifying work be carried to the point where entirely new mechanisms, physical facilities and approaches are required for providing educational services?*
- d) *Will the desire for participation in decision-making and concern for the environment be carried to the point where entirely new institutional mechanisms arise for the control of land use and way of life?*
- e) *Will changes in family life styles and family structure augment or diminish the need for programs and facilities for pre-school children, the youth age groups and the elderly? Will such changes necessitate new approaches to housing policies and physical design solutions?*

These are but a few of the questions which arise from the social prognostications to date. Perhaps the overriding question requiring an answer is:

Will Canadian society some 2 or 3 decades hence living in a new community at North Pickering be ostensibly the same in its basic values and life styles as that of today, or will its differences be so great as to require entirely new responses in physical terms and in terms of human development services required and the ways in which they are determined, programed and delivered?

B. CURRENT AND EMERGING APPROACHES TO HUMAN DEVELOPMENT SERVICES

In view of the social perceptions and prognostications outlined in the foregoing section, an examination was made of the major themes, processes and structures currently in existence or emerging in the areas of such human development services as health, culture and leisure, education, social services, and spiritual needs.

In a general sense they are all characterized by several phenomenon including:

1. More provision for accessibility, involvement and participation of the consumer of the service;
2. Greater emphasis on anticipatory planning for future needs coupled with an upgrading of the quality of services provided;
3. A move toward localized approaches to problem-solving;
4. Expansion of coverage from specific to universal and from a few as a matter of privilege to all as a matter of right; and
5. An interest in combining the methodology of one service with those of others to more effectively and efficiently combat ever increasing needs.

The question which arises in view of these trends is:

Are they compatible and consistent with the social phenomena outlined in the preceding section or at variance with them? Depending on the answer to that question and depending on the degree to which the phenomena themselves are likely to depart substantially from what has been prognosticated, should the current and emerging approaches to human development services be fostered and encouraged or be altered or changed?

C. THE RANGE OF OPTIONS AVAILABLE

The considerations outlined in the previous sections of this chapter have made it possible to determine in a preliminary way the range of options available in the preparation of a plan for social development for the New Community. They can be grouped in five basic categories related to the following considerations:

- individual
- social
- community
- human development services
- planning.

They are succinctly summarized in Table A. In presenting them herein the Project Team is seeking assistance in endeavoring to answer the question:

Do the options in the Table adequately represent the complete spectrum of those available? If they do not, what additions or alterations should be made? Whether they are or are not complete, which combination is regarded by the reader to be most compatible with his perception of Canadian society?

TABLE A: THE SPECTRUM OF SOCIAL OPTIONS

Individual

Wide range of choice	vs	Little or no choice
Stimulation	vs	Stress
Freedom	vs	Security
Privacy	vs	Community

Social

Mixed population (heterogeneity)	vs	Uniform population (homogeneity)
Wide range of values	vs	Shared values
Priority to social goals	vs	Priority to economic goals
"Man-Centred" community	vs	Man viewed as part of total natural ecology

Community

Priority to desires of N. Pickering residents	vs	Priority to regional goals
Goals of N. Pickering	vs	Needs of society at large
Public housing as part of community	vs	Private housing exclusively
Desires of current residents	vs	Desires of future residents

TABLE A: THE SPECTRUM OF SOCIAL OPTIONS (cont'd)Human Development Services

Comprehensive services system	vs	Specialized system
Privately offered services	vs	Public services
Integrated services	vs	Opportunity for choice
Centralized uniform services	vs	Decentralized local orientation
Build-On current services	vs	Design new service system

Planning

Certain facilities and services in place	vs	Determination of services and facilities by residents
Comprehensive planning	vs	Focalized issues of interest groups
Long range planning	vs	Flexibility and meeting of needs as required

II. ECONOMIC DEVELOPMENT

A. FACTORS INFLUENCING THE POTENTIAL FOR ECONOMIC DEVELOPMENT

A preliminary survey indicates that opportunities for new economic development in North Pickering on the New Community Project Site is virtually unlimited. All of the locational requirements for successful industrial development are or will be available including:

1. Proximity to major markets in Canada and the United States;
2. An adequate supply of land with suitable physical characteristics;
3. Availability of superior road, rail and air transportation facilities including possible direct access to port facilities;
4. Adequate services, utilities and communications networks;
5. Proximity to major existing industrial concentrations in both Metropolitan Toronto and Oshawa with a wide range of essential industrial service establishments;
6. Access to good commercial and institutional establishments; and
7. the prospect of an urban centre of outstanding amenities in relation to the natural assets of the Project Site.

The New Community's economic development will be influenced by three prime factors. These are its situation in relation to Metropolitan Toronto, the New Toronto Airport, and the Oshawa-Centred Region.

The growth of Metropolitan Toronto has resulted in the establishment of related and supporting economic activities throughout a region of influence extending from Hamilton to Cobourg, and from Lake Ontario to Lake Simcoe. Metro's ability to generate economic activity presents a potential that could be of outstanding benefit to any major centre of urbanization within its extensive sphere of influence.

In view of its proximity to Metro Toronto, therefore, there should be a strong demand for serviced industrial land in the New Community. Thus, the continuing growth of secondary and distribution industries in Metro Toronto and environs should represent "an economic opportunity" for the New Community.

The New Toronto Airport will have an important influence on the economic base of the New Community. The extent and nature of these influences will be dependent upon the character and timing of the Airport. However, observation of economic activity adjacent to other airports in major Canadian, American and European cities suggests the nature

and magnitude of the potential. Commercial and industrial activity geared to passenger and cargo traffic plus airport oriented operations such as food services are highly probable. In addition, major airports also generate substantial development of facilities catering to the traveling public such as hotels, motels and similar accommodation.

In addition to the potential for the airport to generate employment, it could also have wide spread effects on economic activities in terms of increased markets for housing and commercial services over an area extending from Scarborough to Oshawa.

As part of its regional planning policy, the Province has designated Oshawa as the dominant centre for the area to the east of Metropolitan Toronto. The New Community will be complementary to Oshawa and the growth of the economic base of that city will likely present opportunities for related activities in the New Community.

In addition to the positive contribution of the factors mentioned above in stimulating economic development of the New Community, it must be remembered that it will be in competition with many other urban centres presently under development in Southern Ontario and enjoying similar attributes. The degree to which this competition becomes significant will be dependent on the rate of growth of Southern Ontario in general. Similarly, while the New Airport could have a substantial effect on stimulating economic development, the nature and extent of the impact will be directly related to the type, rate and timing of airport development.

Finally, various objectives and policies may be established by the Province or the future residents of the New Community reflecting a desire to create or maintain a unique character. Should this be the case, these could affect the scope of economic activities that might otherwise be drawn to the Community's industrial and commercial areas.

B. OPTIONS AVAILABLE

Three major possibilities present themselves for the development of the economic base of the New Community. It could have a heterogeneous mixture of industrial and commercial operations involving small, medium and large sized firms with no major industry playing a dominant role.

Its economic base could be heavily dependent on and linked to the airport and consist primarily of airport-oriented or related establishments.

Thirdly, the economic base could be consciously structured so as to consist of highly selected activities that will not only yield sufficient employment and an adequate tax base but will also achieve additional desirable social or other benefits.

The important questions to which the Project Team is seeking answers are:

To what degree should the economic base of the New Community be shaped by the operation of market forces freely operating and to what degree is it desirable to exert control and selectivity in consciously shaping it? And related to that, which local, regional or provincial goals or objectives of relevance to the formulation of a plan for economic development for the New Community could or should take precedence?

III. PHYSICAL DEVELOPMENT

A. ENVIRONMENTAL FACTORS

1. Existing Site Characteristics

A number of studies have been completed and several others are still in progress to document the existing characteristics of the site for the New Community. These include the following:

Natural Physical Elements

- a) Geological Studies
 - i) Structural geology
 - ii) Soils
- b) Hydrological Studies
 - i) Water Quality and Quantity
 - ii) Surface Run-off
 - iii) Drainage Courses
 - iv) Ground Water Regime
- c) Atmospheric Studies
 - i) Air Quality
 - ii) Meteorology
 - iii) Microclimate

Biological Elements

- a) Wildlife and Natural Habitats
 - i) Vegetation
 - ii) Birds
 - iii) Mammals
 - iv) Habitat Quality
 - v) Aquatic Environments

Man-made Elements

- a) Existing Land Use
- b) The Parkway Belt Concept
- c) Noise Sources
- d) Airport Operations Restrictions of the M.O.T.
- e) Restrictions Imposed by Existing Utilities
- f) Buildings of Historical or Architectural Significance
- g) Sites of Archaeological Significance
- h) Existing and Anticipated Major Open Space Areas

Special Analyses

- a) Land Capability for Urban and Recreational Uses
- b) Land Capability for Agriculture
- c) Environmental Character Analysis
- d) Identification of Environmentally Significant Areas

The site for the New Community is one that is physically attractive. It is characterized by gently undulating terrain, gradually dropping in elevation from north to south over 400' in about six miles. It is penetrated by many natural water courses of which the most significant are the Rouge River, Little Rouge Creek, the tributaries of Petticoat Creek, West Duffin Creek along with its tributary to Clarks Hollow, and the tributaries of East Duffin Creek. The Creek valleys of the East and West Duffin in several locations are extensive in width and depth and include dramatic bluffs.

Several areas along and adjacent to the valleys contain extensive vegetation and are extremely good natural wildlife habitats.

There are many substantial stands of trees and sizable wood lots and these coupled with the stream valleys modulate the site physically and visually into interesting parcels that vary in size and character.

Existing development on this site consists of farm dwellings, estate residential uses, hamlets consisting of concentrated clusters of residences and a scattering of a variety of commercial, institutional and industrial establishments.

The site in general consists of relatively large blocks of land defined by the Ontario Concession grid that is in many places interrupted by major natural topographic features.

2. Factors Influencing Development Potential

The natural and man-made characteristics of the site have been examined simultaneously to present a composite picture of the factors that influence its development potential. That composite analysis has revealed the relative sensitivities of various areas.

In broad terms, within the desire to respect the existing man-made and natural environment as much as possible, the scope for urban development on the site is limited primarily along its northerly, westerly and southerly boundaries. On the north are the areas that will potentially be affected most by airport noise. On the east, west and south are those lands which, in keeping with the Toronto-Centred Region Concept will be included in the network of Parkway belts.

Man-made features including existing structures, some of which may be of special architectural or historical significance, hydro transmission lines, an oil pipe line and several sand and gravel pits present features to which particular attention will have to be paid in the urban design process along with the natural assets worthy of preservation and conservation.

3. Options Available

The interim draft Goals and Objectives included in the Appendix to this Report indicate that the Project Team is dedicated to an approach to planning and development that takes the fullest possible advantage of existing ecological systems and relationships in the environment while remaining in harmony with it. Within that framework, the options available will be reflected in the approaches to land use planning and the development of concepts for the form of the community as a whole. These matters are discussed in the final section of this Chapter.

Two important options, however, more directly related to environmental concerns, are the degree to which active viable agricultural activities are incorporated into the community and the potential recreational roles of facilities in the New Community or in the Parkway belts that will surround it to satisfy not only local needs of its residents but also those within its broader region.

Some of the environmental concerns of the Project Team are as follows:

- a) *How do the results of studies by "the experts" compare in their findings with the perceptions of persons living on the project site?*
- b) *What relative importance is attached to the preservation, conservation and enhancement of the diverse existing natural and man-made environmental features?*
- c) *What degree of importance should be attached to ensuring that provision is made in the Plan for Development of the New Community for the sustenance of some agricultural activities?*
- d) *What balance should be achieved between the development of open space and recreational facilities to satisfy the needs of the residents of the New Community in relation to those in its surrounding region?*

B. TRANSPORTATION FACILITIES

1. Existing and Possible Regional Facilities

Many studies are proceeding and a large number of governmental agencies are directly and indirectly involved in planning ground transportation systems in the region covering Metropolitan Toronto, the Lakeshore urbanized area to the east, the North Pickering Community, the proposed Airport and York Region. These studies have indicated the existing and possible future regional facilities that will provide the linkages between a New Community at North Pickering and other parts of south-eastern Ontario.

The major links with the existing provincial highway system would be to Highways 401, 2, 7 and 48. Possible future connections could include those to the northerly extension of the Don Valley Parkway as Highway 404, the possible easterly extension of the Gardiner Expressway, the possible easterly extension and improvement of Highway 7 as future Highway 407 and possible new north-south facilities currently referred to as the east Metro freeway.

Railway linkages are available in the existing Canadian National and Canadian Pacific lines that pass through the project site. The section of the C.P.R. Havelock subdivision line that crosses the airport site is to be removed and a variety of alternative routes are being examined that may provide benefits in terms of the service available to the New Community.

Commuter rail service exists in the form of the GO line just to the south of the New Community site and there is the potential for new services to be established along the other existing rail lines that penetrate the site.

Finally, a study has recently been initiated to identify and evaluate possible routes for intermediate capacity transit facilities linking the New Community with downtown Toronto.

2. Options Available

The existing variation in the degree of commitment to regional transportation facilities serving the New Community, the rate at which transportation technology is advancing, and the degree to which changes are occurring in public attitudes and desires with respect to various modes of transportation all imply a substantial range of options for transportation planning.

Some of these options include the following:

- a) Approaches to transportation planning based on relatively similar usage patterns of private automobile and transit facilities as at present, or based on integrated land use and transportation planning that could potentially reduce the role of the auto and increase the use of public transit;
- b) Approaches that are based on relatively heavy reliance on auto and transit travel for most trips, with pedestrian travel for trips of selected purposes and limited lengths, or integrated land use and transportation planning amenable to substantial increases in pedestrian movements with attendant reduction in the need for auto and transit travel;
- c) Transportation planning assuming work patterns similar to those at present or based on the assumption that work weeks and work days may be varied substantially with attendant differences in the loadings on the transportation network; and
- d) Approaches to transportation planning that maximize the opportunity for accommodating through traffic movements or discouraging it from the New Community.

Some of the questions that emerge then are as follows:

- a) *To what degree will emerging technology and changing public attitudes and life styles permit the development of transportation facilities in the New Community that are substantially different from those in existence in urban centres at the present time?*
- b) *Is it reasonable to assume that even with more carefully integrated land use and transportation planning, the need for auto and transit travel can be substantially reduced in favour of more pedestrian movements or that the role of the auto can be reduced substantially in favour of increases in the use of transit?*
- c) *Is it reasonable to assume that in a community of between 150,000 - 200,000 persons a system of staggered work hours and work weeks could be instituted on such a scale as to achieve substantial reduction in the degree of congestion on the transportation network?*
- d) *Is there any likelihood that advances in communications technology and automation techniques will reduce the need for person movements so substantially as to result in a minimal need for the use of transportation facilities and networks?*

C. SERVICES, UTILITIES AND COMMUNICATIONS NETWORKS

1. Existing and Projected Facilities

The site of the New Community is relatively free of existing services and utilities networks and is thus not subject to the usual constraints affecting new development. There are, however, several major factors that will influence the planning for services, utilities and communications networks. These include the following:

- a) Regional servicing proposals for water supply and sanitary sewerage facilities for the Central York - Pickering servicing system. These will provide the major trunk facilities available to the New Community.
- b) The existing Trans Northern Oil Pipeline that traverses the site in an east-west direction in a 60 foot right-of-way.
- c) A series of major and minor electrical power distribution lines that presently traverses the site as well as the prospect of the new 500 KV Nanticoke to Pickering transmission line that must tie into the Pickering-Gatineau system somewhere near the Cherrywood sub-station on the site of the New Community.
- d) Several sites for possible use as sanitary land fill either within the site for the New Community or immediately adjacent to it.
- e) Possible limitations on the location and type of communications facilities within various degrees of proximity to the future airport.
- f) The potential available in the Pickering Nuclear generating station as an energy source that might be available to the New Community.

2. Options Available

Advances are being made at a rapid rate in the realm of services, utilities and communications with respect to new approaches to combined distribution networks of compatible services, appropriateness of new materials, potential for totally new approaches in performing existing and contemplated functions and integrated systems of operation and management.

Some of the questions which arise in this sphere are as follows:

- a) *What level of services will the future residents of the New Community desire in keeping with their value system and life styles?*

- b) *What will be the acceptable balance between costs for new systems and the benefits derived from them?*
- c) *What limitations will be imposed on the degree of innovation possible in the New Community as a result of the need to integrate them with networks outside of its boundaries?*
- d) *To what degree is it reasonable to assume the acceptability of totally new approaches to the operation and management of these facilities in an integrated manner?*
- e) *What provision should be made in planning communications networks for the New Community that will allow for the possibility that its residents will be prepared to or want to be able to take maximum advantage of technological advancements enabling the majority of interpersonal contacts, shopping, educational, recreational or work functions by electronic means?*

IV. COMMUNITY DESIGN

The Plan for Development of the New Community at North Pickering will emerge in response to the social, economic and physical perceptions developed by the Project Team. These perceptions will arise as a result of the surveys, data collection, research and analyses currently under way supplemented by ideas, concepts and information provided by all interested parties who become involved in any way in the participatory planning process.

It is perhaps safe to say that the greatest range of options will be available in the way in which those factors become expressed in alternative community designs. This will involve consideration of such matters as:

1. possible arrangements of land use patterns with respect to the degree of concentration, dispersal, separation or mixing of residential, commercial and industrial uses;
2. appropriate road networks in relation to land use patterns and the degree of provision for pedestrian, bicycle, transit and vehicular movements;
3. alternative patterns of distribution of facilities for educational, spiritual, cultural, entertainment, recreational or other social and community services;
4. the balance to be achieved in the provision of open space for active and passive recreational use in relation to the natural features of the site and variations in distribution patterns of employment and housing; and
5. the merging of all factors into a physical design expression that is an appropriate reflection of the anticipated goals, objectives and life styles of the future inhabitants of the New Community.

Three of the areas of concern of the Project Team with respect to community design are housing, shopping and urban form. Some of the questions in these areas for which the Project Team is seeking answers are outlined herein.

A. HOUSING

1. *What is the most appropriate mix of housing in terms of the proportion of single and semi-detached units, low density at ground multiple family units, moderate density ground related multiple family units, and high density apartments?*

2. *What is the most appropriate distribution of units for sale as opposed to those for rent and to what degree should provision be made for variations in ownership patterns including condominium or cooperative ownership or composite arrangements involving the ownership of the dwelling and the leasing of the land upon which it is situated?*
3. *Should the primary responsibility for housing construction be vested in the public or private sectors and to what degree should each become involved in the construction of non-profit, full recovery or subsidized housing units?*
4. *What means can be used to assure that housing is adequately responsive in quantity, quality and design to changes over time in the socio-economic characteristics of the population, their values, life styles and changes in the stage of the life cycle?*

B. SHOPPING FACILITIES

1. *Should the provision of shopping facilities occur as a result of pre-planning and initiatives in the public sector or entirely in response to the market and initiatives by the private sector?*
2. *Should the shopping function be regarded as an appropriate companion to other public community services and if so, to what degree should provision be made for lesser or greater integration of multi-purpose facilities of which shopping might vary from minor to major importance?*
3. *To what degree should provision be made for the possibility of the provision of shopping facilities being greatly influenced by rapid advancements in communications and computer technology that might result in entirely new approaches to highly centralized, highly automated shopping operations?*
4. *What importance should be attached to the possibility of utilizing shopping facilities for a variety of social purposes such as facilitating interpersonal encounters or the exposure of larger segments of the population to specialized cultural or entertainment facilities that they might not otherwise be brought into contact with?*
5. *Should shopping facilities be provided in keeping with a highly structured system of organization within the community or should they be disposed in a completely independent and even random manner?*

C. URBAN FORM

1. *Are any of the major geometric approaches to urban form particularly well suited to the physical characteristics of the site for the New Community as well as the projected social and economic characteristics of its future inhabitants?*
2. *Are there any compelling advantages to concentrated, dispersed, or clustered patterns of urban development in relation to the physical characteristics of the site and prognostications about future life styles?*
3. *Is the neighbourhood a socially valid concept for the basic unit of the New Community in relation to prognostications of future life styles and characteristics of the future population or is it an approach that is not relevant or that is too introverted, uniform or undifferentiated as to be relevant? If it is appropriate how large should a neighbourhood be? What components should be included in it? How should it be structured internally and what degree of physical identity should it be given?*
4. *Are there units other than the neighbourhood which will have social validity in relation to the anticipated characteristics of the future population? If so, in what numbers should these be clustered in building up the total physical fabric of the residential components of the New Community?*

The questions posed in the preceding section represent but a few of the total number that will have to be addressed by the Project Team prior to the formulation of the Plan for Development for the New Community. The total scope of matters to be considered will be influenced very strongly by the reactions and responses to this and subsequent Discussion Papers and Interim Reports. The Project Team, therefore, urges all readers of this document to submit their comments.

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I. INTRODUCTION

The Government of Ontario has been aware for some time that the spectacular growth of the Province as a whole is uneven, manifested on the one hand by areas of out-migration and decline and on the other by massive urbanization and industrial concentration with associated social, environmental and transportation costs and benefits. These two sides to the growth process have been matched by two planning policy sets. On the one hand, the Government of Ontario has emphasized economic development and growth. On the other, it has established planning policies whose principal emphasis is upon management, environmental control, orderly urban growth and structuring.

The Central Ontario Planning Region* (COPR) is largely, though not exclusively, set within the latter context. Here the goals and objectives of planning policies must be translated into programs for selective deconcentration, decentralization, conservation and structured growth.

The New Community of North Pickering in the COPR has for its rationale, a considerable legacy of studies, plans, Provincial policies and programs. To a great extent the size, location, role, phasing and transportation settings of the new city are a direct outcome of Provincial planning policies for the lakeshore urbanized area of the COPR, and especially the Oshawa sub-region, as outlined in the Toronto-Centred Region Concept (May, 1970).

This paper reviews the evolution of the Provincial regional planning process, the key features of planning policy as they apply to North Pickering and some important developments in the Oshawa sub-region.

* Regional planning for Ontario is now carried out on the basis of five planning regions. The former Toronto-Centred Region area has been expanded into the Central Ontario Planning Region (COPR).

evident during and after the study that the complexities of metropolitan and regional planning required a broader, regional perspective and that the transportation/land use dimension was only one of several which required integrated analysis. This understanding provided the other major input into the emerging TCR Concept.

2. Design for Development

In the later stages of the MTARTS the Government released its White Paper, "Design for Development" (1966) which enunciated the Provincial commitment to "carry out and give direction to regional land use and economic development planning" (p.3). In this policy statement the Province initiated a reorganization of government agencies to coordinate and make more effective Provincial policies, priorities and outlays. At the same time, a new regional advisory system was introduced. The commitment to regional planning was further articulated in "Phase Two" (1968) and "Phase Three" (1972) policy statements in the Design for Development program.

3. The Toronto-Centred Region Concept*

On May 5, 1970 the Government of Ontario released the document, "Design for Development: The Toronto-Centred Region". This concept defined a region of 8,600 square miles extending from the Hamilton-Brantford area in the west, to the Georgian Bay area in the north and beyond Port Hope/Cobourg in the east.

Three "zones" were delineated as shown on Figure 1. These zones reflect different problems and priorities for the areas and different degrees of policy emphasis. These policies range from those relating to highly-structured, intense urban development ("Zone 1"), modest urban growth within an agricultural, recreational and open space setting ("Zone 2") to selective peripheral urban-economic development ("Zone 3").

Planning policies for the peripheral area ("Zone 3") reflect the complementary trend to decentralize growth from Metropolitan Toronto and to stimulate development in viable urban concentrations some distance from the regional core.

The area immediately abutting the lakeshore urbanized area is expected to accommodate a modest amount of growth, concentrated in the area's principal urban places. This area ("Zone 2") is to remain essentially in agricultural, recreation and other existing open space uses.

* Reference sources for the material in this section are included in the listing at the end of this Paper.

The lakeshore urbanized area ("Zone 1") is designed as a highly structured set of two-tiered cities, differentiated by role, size and growth but tightly integrated through social and economic flows and multi-level communications linkages (especially transit). The concept looks to Hamilton and Oshawa as the regional-terminal cities at either end of the zone.

The Parkway Belt is to provide linear accommodation for:

- a) a range of major transportation and service facilities,
- b) separate the area's major cities by open spaces,
- c) ensure flexibility for future needs,
- d) articulate a discontinuous network of urban, inter-urban and regional open space and recreation areas.

Since its release, the TCR Concept has received public endorsement through more than 200 written briefs and submissions. It was confirmed as Provincial policy in the Budget of 1971. Further confirmation and refinement followed in the report, "Design for Development: A Status Report on the Toronto-Centred Region" (August, 1971) and in the "Phase Three" policy paper of June, 1972.

In addition, the process of refining the concept toward a plan and program has been underway, with a number of implementation measures already evident. These have included major legislative action such as the Parkway Belt, Niagara Escarpment and Planning and Development Acts previously mentioned and population allocation targets for the York area. Perhaps the most pervasive and far-reaching implementation measure however, is the fact that the concept is being developed into a plan through the integrated and concerted action of all Provincial agencies who use it as a common base for policies and priorities. Likewise, the constructive criticism and reaction of the public and local government is, in the final analysis, the principal support and life of the plan.

III. NORTH PICKERING* IN THE OSHAWA SUBREGION

One of the major under-pinnings of the concept for the lakeshore urban area is the selective encouragement of growth in the area east of Metropolitan Toronto. The focus of this growth is to be the regional centre of Oshawa.

* North Pickering is a combination of the conceptual upper-tier cities of Cedarwood and Brock contained in "Goals Plan II" of MTARTS and the original TCR Concept.

The shift of major growth toward this area would serve many critical objectives. It would:

1. Assist in balancing urbanization to the east and west of Metropolitan Toronto,
2. Assist in the selective deconcentration of some of the growth from Metropolitan Toronto,
3. Assist in the diversification and strengthening of the Oshawa sub-regional economic base,
4. Provide some relief and restructuring possibilities for the highly developed Metropolitan Toronto and western lakeshore areas,
5. Enhance the diversity of urban choice for residential and employment opportunities.

The Oshawa sub-region in the Central Ontario Planning Region, and in the lakeshore area, is therefore of considerable strategic importance. It is in this light that the location, role, phasing and transportation connections of the New Community at North Pickering are to be considered.

Given the strategic importance of Oshawa in its subregion, how do we ensure that planning supports these regional policies?

How should these policies be translated into guidelines?

What are the probable relationships between Oshawa, North Pickering and Toronto?

What are the necessary or desirable inter-relationships?

These are the questions toward which the efforts of Provincial planning and the concerned public are now directed.

Perhaps the word "complementarity" suggests the most productive way of approaching these difficult questions. This approach seeks to make each community in the sub-region an integral part of the whole. It requires recognizing the desirable role of each urban place and ensuring that these roles are mutually supporting and reinforcing. This implies planning for some urban centres to specialize in the provision of selective urban services which would reach populations beyond those resident in a particular town. The urban system would then differentiate the component towns and cities of the subregion according, amongst other things, to the kinds of goods and services which each provided. The spectrum of goods and services available in any one centre is likely to range from those normally available in a village or local centre to those found in regional and national cities.

Applying this approach of strategic differentiation of urban roles to the Oshawa subregion, and given that Oshawa is the regional centre and so might provide services such as administration and higher education for the subregion and perhaps somewhat beyond it, a major question is: what planning guidelines will foster the complementary development of North Pickering as a subregional centre?

The opportunities and constraints for developing the economic base of the new town are discussed elsewhere. These are supported by the Provincial policy of fostering growth eastward from Metropolitan Toronto. To meet the objective of integrating North Pickering into the subregional system, it is also important that, so far as possible, those industries and services which are attracted to North Pickering, reflect North Pickering's complementarity to Oshawa. This would then represent a first translation of broad policies into guidelines for the development of the New Community in its subregional context.

Complementarity can also be reflected in the communication channels which carry people, goods, services and information between urban centres in the subregion, and between the subregion and other parts of the Province, by planning transit and communication connections according to the size and role of the cities being connected. In this way, ease of access to the subregional centre, North Pickering, and the regional centre, Oshawa, could be maximized; while special purpose connections between Hamilton, downtown Toronto and Oshawa would tie these major places together. Complementarity between North Pickering and Oshawa could be further enhanced by selective transit facilities.

The differentiation of urban places by function, size and transit connections must, of course, be carried out over time. Since it is obvious that the rate of growth among urban places and alternative ways of phasing in connections between them can materially affect the subregional design, the timing of planned development in itself becomes an important aspect of complementarity.

Much research and discussion is needed to refine this concept, to translate it into planning guidelines which will meet the needs of the people of the Oshawa subregion, and blend it with the opportunities and constraints for the economic development of North Pickering which exist because of the New Community's proximity to the New Toronto Airport and to Metropolitan Toronto.

IV. THE NEW TORONTO AIRPORT*

A. IDENTIFICATION OF SUITABLE SITES

As a result of the rapid increase in air traffic in southern Ontario, the Federal Ministry of Transport initiated studies in 1966 of the need to develop additional airport facilities for the Toronto region. Initial forecasts indicated that the annual number of air passengers in the region might increase ten fold by the year 2000.

These studies focused on the implications of attempting to accommodate such growth at the existing airport and resulted in the publication of the Malton Plan of 1967. This plan indicated that it would be necessary to expand the airport site by the acquisition of a substantial acreage of adjacent land, would necessitate an increase in the number of highway lanes serving the site, as well as the construction of transit facilities in order to provide adequate access and would result in the exposure of more people and land to the effects of flight operations and aircraft noise.

For these reasons and in the light of very strong public representation the Government of Canada decided not to proceed with the full expansion of Malton Airport. A Joint Federal-Provincial Committee was established to develop a comprehensive aviation plan for Southern Ontario. This was intended to provide a framework within which Malton would continue to operate together with a second facility. In 1969, therefore, studies were undertaken to identify sites suitable for a second Toronto Airport within this context. This work resulted in the identification of 59 sites within a radius of approximately 50 miles from downtown Toronto.

B. EVALUATION OF SUITABLE SITES

The initial sites were clustered in four zones to the north, east, west and northwest of Toronto. One site in each zone, regarded as representative, was then selected and a preliminary evaluation was completed utilizing the following criteria:

1. safety and technical aviation considerations,
2. social and environmental effects,
3. regional planning impact,
4. passenger convenience,
5. costs.

* Reference sources for the material in this section are included in the listing at the end of this Paper.

Paralleling this preliminary evaluation was the work on the aviation plan for Southern Ontario. By early 1971, it was concluded that in lieu of a single new airport, it would be more appropriate to establish two systems of airports, one for the Toronto area and one for south-western Ontario. This permitted the reduction of runway requirement for the new Toronto airport from six to four, substantially reducing the area affected by noise, while opening up the possibility for other sites. In addition to sites representative of the four zones previously mentioned, therefore, two additional sites, one to the north-east and the other to the south-west of Metropolitan Toronto were identified for inclusion in the final evaluation.

The evaluation criteria used in the appraisal of the six sites included the following:

1. political boundaries,
2. existing land use and population,
3. planning and development activity,
4. agricultural capability,
5. recreational capability,
6. urban/regional planning,
7. potential for urban development,
8. comparison with conceptual urban airport complex,
9. social and environmental implications,
10. comparative evaluation of adjacent lands.

C. CONCEPT FOR AN URBAN AIRPORT COMPLEX

Examination of the developmental impact of major airports on their surrounding areas and the catalytic potential of a major airport to generate urban growth of substantial magnitude lead to the conclusion that the most effective planning for a new airport must be based on the assumption that it would form part of an urban/airport complex. Prototype concepts of urban development in conjunction with a major airport were therefore developed as a basis for comparing suitable sites. This approach involved provision to include urban development in areas outside flight paths, industrial and agricultural uses in areas which might be affected by flight operations and rapid transit linkages to nearby urban communities.

It was concluded that the feasibility of implementing this concept depended on the suitability of the site conditions for such a pattern. The concept of an urban airport complex therefore became an important criterion in the evaluation of the six candidate sites.

D. RELATION TO PROVINCIAL REGIONAL PLANNING STRATEGY

In late 1969 and early 1970 when the evaluation of the six suitable sites was undertaken, the consultants worked closely with the Goals Planning Committee of the Province of Ontario.

The importance of the regional development goals referred to previously became apparent to the Federal Government and it therefore emphasized the need to integrate the airport into the strategic planning framework for the Toronto-Centred Region.

Originally, this concept had envisioned two upper-tier cities, Cedarwood and Brock. Following the announcement of the site for the new airport, the Province modified these original proposals by merging them into one large community adjoining the airport site.

V. REGIONAL GOVERNMENT EAST OF METRO*

A. THE REGIONAL MUNICIPALITY OF DURHAM

1. The OAPADS Study

The area east of Metropolitan Toronto has been the subject of intensive research since 1969 when the "Oshawa Area Planning and Development Study" was initiated. Work continued until May, 1971 when the Study was terminated. That Study included proposals for the reorganization of local government in the Study Area.

2. The United Counties Study

Following the OAPADS Study the United Counties of Northumberland and Durham commissioned a study of a system of local government in that area. The report, as accepted by the counties, recommended the formation of 8 municipalities in Northumberland - Durham in place of the existing 24.

3. Proposal for Local Government Reform in the Area East of Metro

Following the attention given to local government reform, the Province of Ontario received numerous briefs, including many conflicting proposals, from public groups. In December, 1972, the government put forward its "Proposal for Local

* Reference sources for the material in this section are included in the listing at the end of this Paper.

Government Reform in an area East of Metro" for local discussion purposes. The location of the New Toronto Airport had been announced and was taken into account in the proposal.

a) Regional Boundaries

It was proposed that "The Regional Municipality of Durham" be established which would include Ontario County excluding some of the rural Townships in the northern part of the County and would include part of Durham County to the east.

b) Area Municipalities

It was proposed that the region be divided into nine Area Municipalities. The Airport and Pickering Community sites were designated as "Area Municipality No. 9".

4. Bill 162, An Act to Establish the Regional Municipality of Durham, June 1973

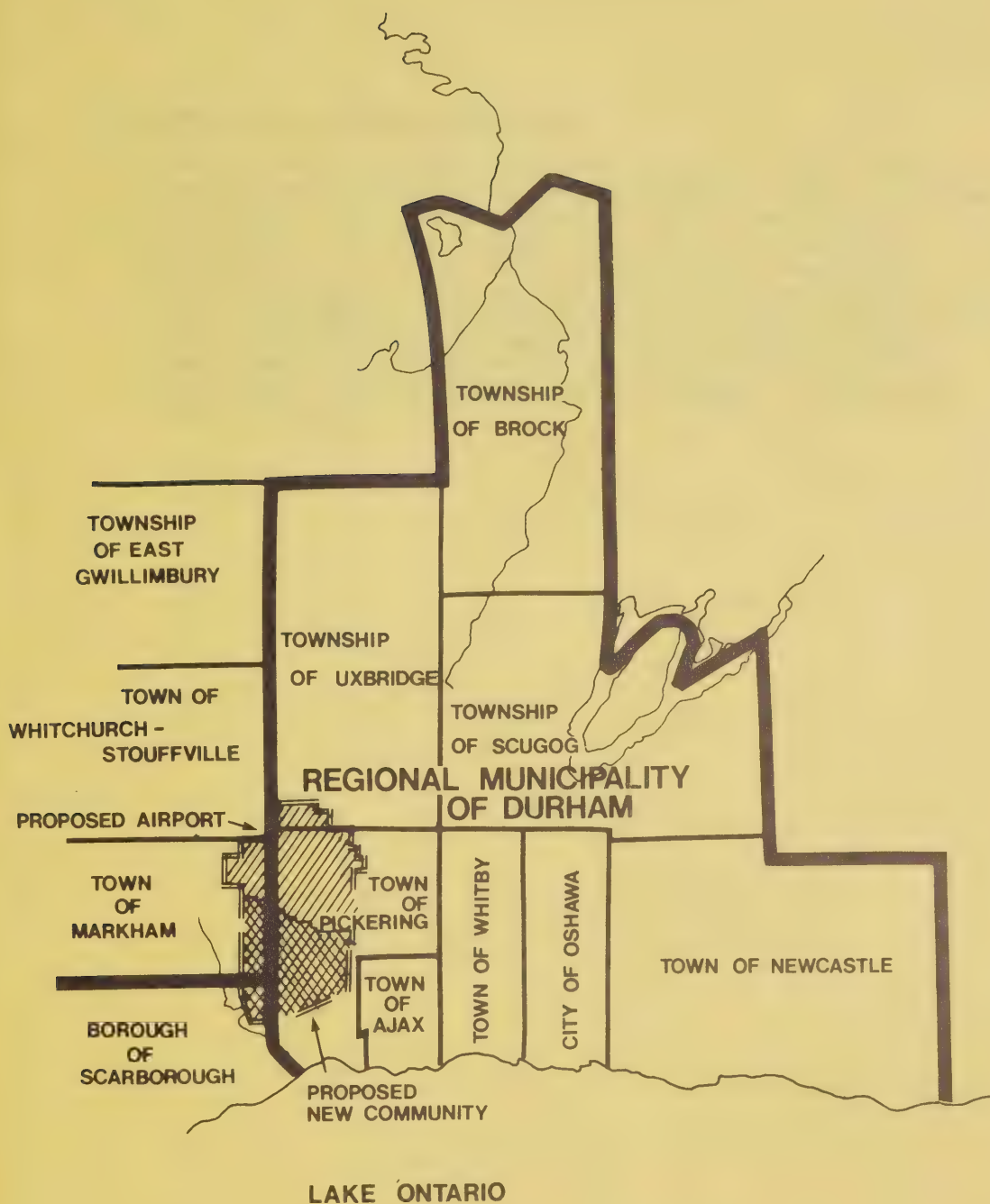
a) Region Boundaries

Substantial public reaction was received to this "Proposal for Local Government Reform in an Area East of Metro". Since no specific plan for urban development in the North Pickering Community had been prepared and since the Airport role was not finalized, it was decided to retain the existing western boundaries of the region (except for the West Rouge Area) until future plans were available. Other boundaries as set out in the 1972 government proposal were also altered. In particular, the area east of Clarke Township was excluded and the northern Townships of Scott, Brock and Thorah and the Villages of Cannington and Beaverton were included to accommodate proposals received.

b) Area Municipalities

The region comprises eight Area Municipalities now called:

- the City of Oshawa
- the Town of Ajax
- the Town of Newcastle
- the Town of Pickering
- the Town of Whitby
- the Township of Brock
- the Township of Scugog, and
- the Township of Uxbridge.



LOCATION OF THE
PROPOSED AIRPORT AND NEW COMMUNITY

c) The North Pickering Community

The site of the North Pickering Community, therefore, lies primarily within the Regional Municipality of Durham and within the Area Municipality of the new Town of Pickering. The small south-west corner of the site presently lies within the jurisdiction of the Borough of Scarborough in the Municipality of Metropolitan Toronto while that portion of the site north of this lies in the Town of Markham in the Regional Municipality of York. Figure No. 2 illustrates the location of the sites for the Airport and New Community in relation to adjacent Municipalities.

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NORTH PICKERING
COMMUNITY
DEVELOPMENT
PROJECT

GENERAL BACKGROUND PAPER NO. 2:
INTERIM DRAFT GOALS AND OBJECTIVES

NORTH PICKERING COMMUNITY DEVELOPMENT TEAM
MINISTRY OF TREASURY, ECONOMICS AND INTERGOVERNMENTAL AFFAIRS

PLANTOWN CONSULTANTS LIMITED
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I. IMPORTANCE OF GOALS AND OBJECTIVES

At the outset of any plan formulation process, it is essential to establish the goals and objectives that are to be met. These provide the point of departure from which all planning proceeds and establish an important part of the framework utilized to evaluate alternative plans. In planning exercises there are usually many possibilities. These can be limited by determining the degree to which alternative proposals are able to meet stated and agreed upon goals and objectives. It is for that reason that such importance is attached to the careful enunciation of goals and objectives during the early stages of the plan formulation process.

Preliminary statements have been prepared by the North Pickering Community Development Project Team to guide its work. They are presented herein to provide the basis for review and discussion by all interested parties as the initial step toward establishing a set of progressively more detailed goals and objectives for the New Community.

It should be noted that it is recognized that these, like any other factor affecting the plan formulation process, may change over time. It is intended, therefore, that they be kept under review throughout the course of the Project.

II. GOAL AND OBJECTIVES

A. GOAL

As a Provincial Project to plan and nurture innovatively the development of an exciting and attractive new Community as envisaged in the Toronto-Centred Region Concept in a manner which:

- a) provides the greatest social and economic benefit of public and private investment for the Community, the Toronto-Centred Region and the Province;*
- b) fulfills the psychological, cultural, environmental and aesthetic needs and aspirations of the people who choose to live there; and*
- c) promotes the opportunity for the meaningful involvement of people in the planning and development and future administration of the Community.*

B. OBJECTIVES

1. Regional Context

- a) *To plan and develop a Community which will adhere to the principles of the Toronto-Centred Region Concept as a Sub-regional centre.*
- b) *To designate surrounding open space areas which define the Community as a distinct urban area and which form a part of the Regional parkway belt and service corridor systems.*
- c) *To ensure that the Community utility services such as water supply, sewage collection, transportation and other infrastructure, are integrated into the planned regional facilities.*
- d) *To ensure that social and community services are integrated into future regional institutions.*

2. Community Development

- a) *To attract people with a range of values, life styles, age and stage of family development, and socio-economic status.*
- b) *To ensure that the planning and development of the Community take the fullest possible advantage of existing ecological systems and relationships in the environment while remaining in harmony with it.*
- c) *To provide a transportation system which:*
 - i) *minimizes the social and economic costs of joint private public sector transportation development,*
 - ii) *contributes materially to the public's use and enjoyment of the environmental, social and aesthetic amenities within the Community, and*
 - iii) *is compatible with, and promotes the development of desired land-use patterns, yet is flexible enough to allow for desirable changes in transportation technology and minor variations in land-use development and transportation technology.*
- d) *To develop a comprehensive open space system which would include the full range of community open space requirements.*
- e) *To provide the Community with a comprehensive, innovative and economical system of utility services which are a model of technical, environmental and aesthetic excellence, and to arrange those necessarily fixed elements in such a way as to allow the greatest possible flexibility for change as development proceeds.*

- f) *To utilize the proximity of the Airport and its related activities for the social and economic benefit of the Community.*
- g) *To plan for a wide range and variety of residential development.*
- h) *To develop a broad range of educational, social and community services and facilities responsive to the needs of the people.*
- i) *To attract and promote a wide variety of light industrial, commercial, service and institutional enterprises so as to provide a diverse economic base and variety of employment opportunities for the residents of the Community.*
- j) *To promote an effective and responsive system of local government through which present and future residents can achieve a Community environment that will satisfy their needs and aspirations.*
- k) *To achieve a high quality of innovative architectural and urban design in the Community.*
- l) *To produce an on-going Plan for Development which allows flexibility for change in all aspects as development proceeds.*

3. Individual Development

- a) *To promote opportunities for individual development by providing the widest possible choice in employment, leisure activities, education and housing.*
- b) *To provide present and future residents with the opportunity for meaningful participation in the planning, development and management of their Community.*
- c) *To create a physically and psychologically healthy and safe environment.*

III. PROJECT POLICY GUIDELINES

In addition to the goals and objectives outlined above there are a series of policies that have been adopted by the Project Team to act as guidelines throughout the plan formulation process. These too are regarded to be objectives to be achieved in the preparation of the Plan for Development. They are as follows:

- a) *To involve the public in the total process of planning and development in order to produce a better Community and to promote personal and community development.*

- b) To take into consideration all of the dimensions of the total environment in planning and developing the Community.
- c) To ensure that the development of the Community does not impose a greater financial burden on provincial taxpayers than is imposed by similar communities through the established provincial grant structure, except for expenditures of an experimental or research nature that will be of general benefit.
- d) To establish within the Community a level of property taxation appropriate to the Community, but not higher than for comparable communities within Ontario.
- e) To develop the Community with the assistance and involvement of private enterprise.
- f) To apply technological and institutional innovations in the planning and development of the Community.
- g) To utilize and extend through the creation of this Community Canadian experience, expertise, and knowledge in modern urban development.
- h) To control land prices within the Community in order to promote economic development and permit homeownership for the widest range of income levels and to influence property prices in the Toronto-Centred Region.
- i) To expedite the provision of quality housing for people with a wide range of incomes, types of household and styles of living.
- j) To redress social and economic hardship to existing residents caused by government initiated change by easing the transition for those who choose to stay in the Community and for those who choose to relocate.
- k) To ensure that the present levels of municipal and education services are maintained until new levels of community services are established.
- l) To preserve as many historical buildings and landmarks as feasible.
- m) To ensure that the Community is served by an efficient, economical range of telecommunication systems.
- n) To ensure that the development and operation of the Community adheres to the principle of the conservation of energy.

NORTH PICKERING
COMMUNITY
DEVELOPMENT
PROJECT

SOCIAL DEVELOPMENT BACKGROUND PAPER NO. 1:
INITIAL OBSERVATIONS ON THE CHANGING NATURE OF URBAN MAN
AND APPROACHES TO HUMAN DEVELOPMENT SERVICES

NORTH PICKERING COMMUNITY DEVELOPMENT TEAM
MINISTRY OF TREASURY, ECONOMICS AND INTERGOVERNMENTAL AFFAIRS

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A. INTRODUCTION

The material included in the various sections of this paper stems from a work program which included contributions from relevant ministries of the Provincial Government; a series of seminars with persons involved in the delivery of human development services; the commissioning of seventeen theme papers on various aspects of "man"; and an extensive literative search.

The first phase of the work program has placed a heavy emphasis on involvement of key civil servants, "experts" in the fields of behavioural science, and persons involved in the provision of human development services.

While it has been impossible to involve future residents of the North Pickering Community since they are not identifiable, the second phase will seek out "surrogate" groups for a series of discussions. These discussions will be centred around the attitudes, perceptions and expectations of "new town" residents towards a new community. The results of these discussions will be reported in a subsequent paper.

The following is a brief summary of the work program in Phase I.

1. Provincial Government Participation

Coordinators from the Provincial Government in the areas of education, health, recreation, culture, social services and libraries have been working closely with the North Pickering Project Team.

In some areas, task forces have been formed to consider goals, future directions and possible alternatives in the provision of services. Past studies, reports and current thinking in these ministries is being shared in the planning process.

2. Position Papers

Seventeen papers referred to as the "North Pickering Social Development Papers" were commissioned early in Phase I. The theme of these papers was "Man in the Centre". The aim was to look at man from several different perspectives and to identify how a new community could facilitate the growth of its residents from each of these perspectives.

The titles of these papers and their authors are:

<u>Title</u>	-	<u>Vol. I</u>	<u>Author</u>
1. Educated Man			Dr. Roby Kidd
2. Aesthetic Man			Mary-Elizabeth Bayer
3. Spiritual Man			Rabbi Gunther Plaut
4. Mentally Healthy Man			Dr. Donald Meeks
5. Community Approach to Physical Fitness			Judy Holland
6. Man the Organizer			Dr. James Draper
7. Man and His Man Made Environment			Dr. Myra Schiff
8. Towards a Philosophy of Social Development			Dr. Francis Bregha
- <u>Vol. II</u>			
9. Man and Community: A Radical Humanist Perspective			Dr. David Livingstone
10. Family Man			Margaret Farina (Umberto D, Antini)
11. Healthy Man - Physiological			Dr. Cope Schwenger
12. Psychological Man			Carl Johnston
13. Leisure Man			Dr. John Farina
14. Spiritual Man			Father Arthur Gibson
15. Spiritual Man			Rev. Al Forrest
16. Man and His Natural Environment			Dr. Jack Wright
17. Urban Man			Dr. John Hitchcock

A full day conference brought the authors together to critique the papers and exchange viewpoints on their contents.

3. Seminars

A first round of seminars was held with representatives of public and private agencies providing education, health, recreation, library, legal, spiritual and social services. The direct experience of these agencies gave insight into the problems, issues and opportunities regarding the provision of human development services.

4. Literature Search

Five graduate students were employed for the summer to identify relevant information from reports, journals, books and unpublished documents that would be helpful in designing social development policies and programs for a new community. Topics covered were:

- a) education
- b) recreation
- c) cultural
- d) social services
- e) health
- f) spiritual services
- g) family life styles
- h) community decision making
- i) new towns
- j) concepts of community.

B. THE CHANGING NATURE OF URBAN MAN

This section of this paper presents some of the emerging attitudes, values and life styles which are currently manifest in Canadian society. To estimate the number of persons who hold these values is not possible. The objective research necessary to make such a statement has not been accomplished.

Further, it is not intended that these are necessarily supported as good or bad. Rather, they are presented as a basis for discussion among those interest groups who are participating in the planning of North Pickering.

The objective in doing so is to gain further insight into the range of possible life styles that may be present in the 1980's and thereby provide guidance in the overall planning task.

The paper does not go into traditional values and life-styles which are common to the majority of Canadians as it is felt that these are well known. Rather the emerging trends receive emphasis, even if they are held by a minority, in order to give broader social scope to the task of planning the future Community of North Pickering.

1. Shifting Values

Values can be defined as the highly central, deeply rooted basic beliefs of people. They are a reflection of personality traits, upbringing, education, peer groups, social class, community attitudes, current social philosophies and ideology, and world events.

Since individuals are linked together in groups and communities by ideas, interests and attitudes, all of which stem from basic values, the critical importance of a discussion on values becomes obvious. The cohesion and smooth social functioning of a community depends to a large extent on the degree to which its members share common values and have tolerance for those values which are not shared and their concomitant life styles.

Forces which are affecting shifts in values are growing national affluence, higher levels of education, communications, mobility, more blocks of free time and increased consciousness of a global village.

The shift in values will be uneven and as varied as indeed is the current mosaic of the Canadian people. If they shift too rapidly, the result may well be a turbulent society which has lost continuity and identification with its past. Sir Geoffrey Vickers has stated that "Culture changes with the generations, but as with other changes, there is a limit to the rate at which it can change without losing its coherence".

a) The Trend Towards Individuality

The next twenty years may witness an accelerated shift in values and ideological orientation. Values ascribed to human dignity, individuality, self-respect and self-actualization may be the dominant theme. Secondly governments, private enterprise and all forms of institutions will likely place more emphasis on the individual. A "client" orientation may prevail rather than an institutional orientation. Basic values of democracy and equality may emerge in increasingly participative forms of government, management and generally all matters which affect individual life styles. Individuality in education, religion, employment, and leisure pursuits may prevail in the new consciousness of the 1970's and 80's.

A counter trend to the theme of individuality might be an increasing amount of "control" imposed by economic, societal and environmental constraints. Population increases, higher land and home prices, the limitations of energy and natural resources (including air, water, wildlife, shoreline, etc.) may inhibit privacy and the variety of choice in activities.

In order to protect individual freedoms and rights as well as environmental integrities, there may necessarily be restrictions and reductions of freedom of all individuals.

Increased populations, higher densities and heightened levels of stress, are likely to put a premium on the value of privacy. The lack of privacy for some will frustrate their quest for self-identity and self-expression.

b) Changing Human Relationships

Shifts in values tend more and more to encompass all forms of human relationships. The central theme appears to be greater equality. It is evident between men and women, parents and children, teachers and students, workers and management. Organizational structures are tending to be more horizontal and less vertical; relationships more cooperative rather than competitive; more enabling and less prescriptive. This is evidenced by key phrases of the past few years such as "Participative Management" and "Participatory Democracy".

c) Leisure

Leisure is not a future phenomenon - it is with us now. The ratio of free-time to work-time is a positive ratio. The only groups for whom the free-time to work-time ratio is negative are the members of scientific, professional, executive and political communities. For many of these persons, the distinction between work and leisure is not realistic for they are doing what they do as a matter of choice rather than necessity.

Leisure is no longer a privilege of the wealthy. Increasing blocks of free time, higher levels of education, and more discretionary income have introduced leisure to the majority of Canadians. Leisure is achieving recognition as a value in itself and not merely a reward for work. The Historian Arnold Toynbee has stated that the destiny of a nation is determined by the manner in which its citizens occupy their leisure.

As the consciousness of Canadians reaches higher levels, it is likely they will seek out and participate in wider ranges of activities, experiences and relationships. Increased consciousness may also result in a fuller appreciation of aesthetic values including the arts, man-made physical environments and natural environments. Self-fulfilling and self-actualizing experiences are likely to be sought by more Canadians. In some instances, this may find expression in voluntary services to the Community.

d) Knowledge

While existing educational institutions, processes and programs are currently being questioned and studied as to their suitability, the existence and availability of knowledge will none-the-less be highly valued. Knowledge may become increasingly important in all the professions and other forms of occupation; for leisure pursuits; for solving social, environmental and economic problems; for governing, and as a self-gratifying pursuit of knowledge for the sake of knowledge. "The Knowledge Industry" may in itself become the next major thrust of our society.

Various Commissions on education in Provinces across Canada over the last ten years have recommended a shift in policy from education and training for work towards learning for living and living for learning. Some educators advocate the entire community be designed as a learning environment.

Within the next twenty years, industry, commerce, governments and institutions may be recognizing life-long learning as a policy in employee relations. Leaves of absence and sabbaticals may no longer be the domain only of the academic community.

e) Participatory Ethos

Participation in decision-making appears to be receiving increasing attention as a value by both citizens and institutions generally. Governments at all levels are encouraging participation; McGregor's theory of "Participative Management" is gaining acceptance; students are gaining a voice in academia.

While appropriate structures for participation are developing, a broad range of issues are being addressed by spontaneously formed ad hoc groupings.

Participation is likely to continue to be upgraded as a value as individuals and groups strive to gain control or at least influence those plans and decisions which affect their lives. Participation is also valued by some as an element of personal growth in itself and as a vehicle for social interaction.

The main factors which affect both the extent and quality of participation are the issues themselves, leadership and responses by those in authority. Future participation by citizens will vary according to the mix of these factors.

A possible counter-trend inhibiting participation may be the increasing complexity of social issues and therefore the complex decisions which will be required. To be able to participate in a constructive manner may require increasing knowledge and time by a population which values highly its leisure hours. Some citizens may feel inadequate to deal with the issues, others may simply be content to leave the issues to the "experts". Still others, because of alienation may be apathetic to what is happening around them and not participate - whether issues are simple or complex.

f) Trends Towards "Communities of Interests"

Traditional concepts of community stem from a territorial perspective; a bounded entity recalling an agrarian era when people lived rooted to the soil in mutual interdependence.

Current trends are the antithesis of such a notion - mobility, increased consciousness, wide ranges of interests. It is no longer valid to assume modern man can gain all his social, occupational and leisure satisfactions within a singularly defined territorial boundary. Rather than territory as the major dimension - interests are becoming the major dimension.

Throughout this paper mention is made of the "scientific community", the "academic community", "political community". These are the communities which are increasing in relevance - "communities of interest". They also include social, cultural and leisure "communities of interests". Some groupings are more lasting and structured, others may be ad hoc temporary responses to specific issues or interests.

As modern man continues to expand his interests, time will be highly valued and "community relationships" formed are likely to emphasize those which enhance one's own self-concept and personal development goals. These are more likely to be accomplished through communities of interest, facilitated by modern transportation and communication technology, rather than territorial communities.

While the "community of interest" appears to be the emerging trend, it must be realized that it affects primarily the educated, affluent and mobile of our society. For most, the territorial community remains of key importance. This is particularly so for certain population segments such as pre-schoolers, housewives and senior citizens.

For some there is a nostalgic return to the notion of territorial community as a desire for a simpler way of life and escape from the excessive, stress-producing, anxieties of a modern urban society.

g) Environmental Concerns

Environmental related values, conservation and preservation may continue to be sharply upgraded over the next twenty years. Efforts of conservation groups such as the Algonquin Wildlands League and its well publicized stand re: Algonquin Park; education in environmental quality; concern by the scientific community and resultant publications such as "Limits to Growth?"; developing social philosophies of living in harmony with nature; and increasing public awareness may all contribute to environmental values. In certain instances the standard of the urban environment has become so degraded that Government controls and expenditures have been required to improve them. Governments are likely to continue to respond with legislation to improve the environment as public awareness and pressures mount.

With upgraded environmental values, it may be anticipated that various groups concerning the environment will become better organized, broader in scope, more knowledgeable and more influential.

h) Economic Attitudes

Values related to materialism are likely to be downgraded in the next twenty years. The youth of our society generally oppose such values and it is they who will be parents, politicians, board members, senior civil servants and decision makers within the next twenty years.

Rather than major emphasis on increased productivity, emphasis may begin to evolve towards a "quality of work experience" and humanistic working environments encouraging personal initiative. Rather than "hard work" being perceived as a virtue, rewarding work and work contributing to society may be regarded a virtue. Ad hoc types of organizations for specific tasks may be more prevalent.

As materialistic values decline, so may the value of ownership be downgraded. Government land use policies, rising costs, increasing mobility in leisure as well as career pursuits, wider ranges of interest, increasing emphasis on flexibility and freedom may all contribute to this down-grading. The leasing of cars, renting of recreational vehicles, shared facilities in the form of clubs and cooperatives may be the emerging patterns of man-material relationships. Off-setting this trend is the purchase of homes and other material goods as an investment and hedge against inflation.

The economic emphasis may be the "buy-back" of Canada; Canadian ownership, extraction and processing of natural resources, and the continued redistribution of wealth. A better balance is likely to be sought in the tri-polar trade-off of economic - social - environmental goals.

i) Search for Meaning, Identity and Spiritual Satisfaction

While the spiritual life is related to man and his meaning it reflects a concern for man and his meaning in relation to his milieu, or universe, or nature. Towards this end, there appears to be evolving a new humanistic morality that is actively exploring the possibility of codification in religion. New Christian sects, explorations of Oriental religions and philosophy, probes into mysticism, ultimate acceptance and questioning of modern philosophies, new linkings of science and religion, all reflect current searchings. Today a significant proportion of our population is adrift in their search for identity and meaning, but the search has not been abandoned rather it is being pushed forward on all fronts. In future years the search may continue via all means that respect human dignity and the right to seek individual meaning in life.

The search for meaning may become increasingly difficult for some. The fragile nature of family ties, the transience of people, places, things, organizations and information relationships described by Tofler, will make the search for some dramatic and sometimes traumatic. The groping for meaning of life through drugs and/or esoteric cults may well create serious disruptions unless society is open to and helpful in these struggles.

j) Human Development Services

Health services, social services, legal services and an acceptable standard of economic maintenance (i.e. Guaranteed Annual Income) may be considered basic rights of every citizen within the next twenty years just as public education is at present. The societal trend which has moved from amputation (ostracizing) to treatment (maintenance) in the last century will likely move forward to prevention in the next twenty years. The next conceptual phase which in the next few years may emerge and be a dominant theme in the 1980's is positive health and well-being. Greater emphasis may be placed on a positive state of physical fitness, emotional and social well-being and self-developmental values generally rather than simply the absence of physical, mental, emotional or social maladies (i.e. the concept of prevention).

Opposing the view of economic maintenance (i.e. Guaranteed Annual Income) as a right are those who argue that a society which provides economic rewards to those who prefer not to work can only expect turbulence. The combined phenomena of high levels of unemployment and high levels of inflation has resulted in significant upward adjustments by all three levels of government in unemployment and welfare benefits.

As a consequence, there are employers who claim that current unemployment benefits make it impossible for them to find workers; that they have jobs available but few persons seeking employment.

Further, there is resentment among those persons who are working and earning wages equal to or only marginally higher than the benefits paid to the unemployed. The resentment is shared to varying degrees by working persons with higher wages, whose tax dollars are required to support the unemployed.

k) Summary

Table A provides a summary of the major value shifts likely to occur in the next twenty years. It is primarily based on the work of Eric Trist as reported in "The Relation of Industrialism".

2. Emerging Family Life Styles

Whatever changes have occurred in the development of western civilization over the centuries, the family has and will likely continue to be its basic socio-economic unit. The family constitutes the beginning and most essential element of society. There is a clear inter-dependence between it and society, each affecting and in turn affected by the other.

In pre-industrial and to a lesser extent in early industrial societies, the nuclear family formed part of a larger family network referred to as the extended family. Each person of the nuclear family had "support" from other members of the nuclear family as well as the extended family for tasks such as child-rearing. The transmission of values, and behaviour patterns was comparatively simple, as a person's social frame of reference was relatively limited and closed.

Today, however, in a society characterized by rapid change, technological automation and large-scale urbanization, the boundaries of the family have contracted. We rarely think of "family" as more than the nuclear group composed of parents and dependent children. It is no longer self-sufficient, and the roles and expectations of its members are undergoing rapid, extensive change.

TABLE A: SHIFTS IN VALUES

THE INDIVIDUAL

From

endurance of distress
 puritanism
 conformity
 materialism
 self-control
 achievement
 hard work a virtue
 competition
 narrow interests

To

capacity for joy
 sensualism
 individualism
 humanism
 self-expression
 self-actualization
 rewarding work a virtue
 co-operation
 wide range of interest

SOCIETY

authoritarianism
 independence
 tradition oriented
 education to earn a living
 work orientation
 parochialism

participation - involvement
 inter-dependence
 future oriented - experimentation
 education for living
 leisure orientation
 "global village" concept

ORGANIZATIONS

mechanistic forms
 competitive relations
 separate objectives
 own resources regarded as owned
 exclusively

organic forms
 collaborative relations
 linked objectives
 own resources regarded also as
 society's

STRATEGIES

responsive to crisis
 specific measures
 requiring consent
 short planning horizon
 standardized administration
 separate services

anticipative of crisis
 comprehensive measures
 requiring participation
 long planning horizon
 innovative administration
 co-ordinated services.

Families of tomorrow will likely take on forms that are different from the usual nuclear family that we think of as a relatively stable unit of two parents and their dependent offspring. Traditional families will continue to exist, but they may be proportionately fewer as divorce becomes more easily attainable and increasingly accepted. The concept of communal care of children is age-old and is presently available to middle-class families who can afford to pay for nursery schools. Less affluent families have a variety of ad hoc arrangements for sharing this task, many of which have communal characteristics. In the future community, early childhood care may be available to all, and be fully accepted.

The internal structure of the traditional family will continue to evolve along lines that are evident today. Since roles within the family may cease to be defined by sex, there may be greater equality of the sexes, although it is doubtful that full equality will be a reality within the foreseeable future. It may, however, be common for the female to be the major bread-winner in the family, and it may be equally common for the male to take on or to participate in the homemaking and childrearing tasks traditionally assigned to the female. People in families may express their individuality in ways other than through traditionally assigned roles. Because of the emphasis on the individual, family members may have much more freedom to come and go, to pursue their own interests, rather than to submerge their individuality in assigned family roles. No longer will family life style, social status or location revolve solely around the husband's employment. The emphasis may be on individual needs and wishes and self-growth, and the family may no longer be parent, child, or role dominated.

It may be common for people to come into marriage having had previous sexual experience. Although traditional marriages may continue to be labelled monogamous, there may be tacit, if not formal acceptance of extra-marital sexual relationships for both partners. Marriage contracts may be more open and flexible, and no longer functionally founded or dissolved on the premise of sexual exclusivity.

Non-legalized marriages may be more prevalent, and just as today, may fall into the same patterns as the traditional family. It is highly probable that there will be an increasing proportion of short-term unions, whether legally contracted or not, some of which may be labelled "trial marriages". In any case, these short-term unions may be most attractive to people whose life styles or whose occupations indicate mobility, or they may simply be of people living together because it is convenient to do so, or of people who are consciously experimenting with life styles. These groupings of people in "family" units may be much more accepted as a part of society and they may be recognized as having the same rights and responsibilities as any other family model.

There may also be more single-parent families with an increasing number of these being father-led. With less pressure to conform to traditional patterns many couples may remain childless and they will do so without feelings of guilt or difference. There may also be more single people who have one or more of their own "out-of-wedlock" children living with them. Some single people may choose to adopt children, and in this regard the male may have equality with the female in qualifying as an adoptive parent. Homosexual unions may be increasingly sanctioned by society, although it is doubtful that such sanctions will extend to the ability to adopt.

The developing flexibility of the traditional concept of family and of the roles of the parents, together with the projected increase in single-parent families may necessitate more and better nursery and child-care planning and facilities. Family planning may be commonplace as the focus continues to sharpen on concern for the quality of growth and development of children. With the increasing acceptance of the value of early group-living experiences, facilities for the care of children may be geared to development on an individual basis within a context of "love" rather than "caretaking". These centres may be staffed by both well-trained men and women. They may be relatively small, and an integral part of every multiple-dwelling unit that houses families with children and every neighbourhood grouping of family homes.

Finally, with an increasing proportion of elderly people in our society, some may be attached to families through kinship bonds; others may relate to other people in unions that are no different from those of other age groups. Elderly people may live singly, in couples and in communal groups. Generally speaking there may be more recognition of the needs of the elderly and, consequently, more humane treatment. Rather than remote and isolated "homes for the aged" there may be expanded facilities for care of the aged and ageing in their own homes. This care may include hot meal programs, physical care as required and social programs. Most communities will have integrated, neighbourhood-based residences for elderly people who may require varying degrees of homemaking, nursing or medical care. These residences may be geared to maintaining the elderly resident in the mainstream of community life for as long as possible. Consequently, they may be located on main transportation routes and be close to the amenities of the community. They may be designed to allow the elderly person (as individual, couple or group) to maintain as much independence as possible and to have their own belongings about them so that they may continue to view themselves as people continuing to contribute to their families and communities.

It is highly likely that there will be continuing experimentation with various forms of group living - communes of all types with varying patterns of internal relationships. Some of these may be open and flexible, while others may be more defined and rigid. And although today they seem to be the preserve of the young, future communal forms of living may be adopted by various age, sex and interest groups.

One of the major needs of the teenager is help in separating from family and in consolidating himself as an individual. In order to do this and at the same time to readjust bonds with family, there should be hostels in the community where he might live for varying periods of time - an extension of the communal care that is arranged for the young child. This kind of resource may well pick up where parents lack skill or interest, either for sustained periods of time or to relieve stress during short, crisis times. Such hostels would be staffed by trained people who are empathetic to the needs of young people in this age bracket.

The teenager also needs experience in living which includes discovering and relating to the world as a whole and to this end, the educational system may be flexible enough to permit these young people to "drop out" for periods of time and to re-integrate at a more mature level.

Developments in education indicate that some families may be participating in learning experiences together. Parents may not be tied to an eleven month work year, or children to a ten month school year. Families may be enabled to devote long periods of time to the pursuit of common interests which may include travelling or living in different parts of the world, not for the purpose of travel per se, but to connect with other cultures. Many, of course, may choose to remain in their own communities, but they will be able to pursue a wider range of interests on both a family and an individual basis.

The family of the future, although differing in certain functional characteristics from the historical family, will continue to be predicated on the concept of commitment, which in the future may be defined more in terms of quality of emotional content than in legal or temporal terms.

The manifold forms of family life described above may all incorporate the family's shift from a security orientation to a freedom orientation. Freedom may allow the individual the flexibility to adapt to a changing society; security within a kaleidoscope environment may come from the intensity of his relationships and commitments, and not from their length of duration.

The intensity of emotional commitment within any relationship is inexorably tied to the concept of shared growth. Future community responsibility may be to assist and facilitate the growth of its members as both individuals and as members of a family group.

A recent book by Schlesinger, Families, A Canadian Perspective provides a point form summary of the current shape of the Canadian family which:

- "includes only the small, two-generation unit of parents and their children
- relies on companionship and the need for loving and being loved as the prime bonds for its inner unity
- accords husband and wife relatively equal status in making family decisions
- sets itself up independently in its own house or apartment
- has severed most close ties with blood and in-law relatives
- prefers to associate with families of similar race, religion, age make-up, and socio-economic status
- places a high premium on comforts, conveniences, and whatever else cash or credit can buy
- prolongs the economic dependence of its children while increasing their freedom to date and to marry
- believes in a religious ceremony for marriage but regards the church mainly as a valuable community institution
- encourages its members to participate in various worthwhile community causes and organizations
- looks to persons outside the family for guidance and counsel on marital or family problems
- accepts marital failure as a normal human risk which should not deny the opportunity for marriage
- completes its parental responsibilities within the first twenty to thirty years of marriage, then reverts to a husband-wife relationship
- has no place for the unmarried adult whether voluntarily or involuntarily unmarried, whether male or female
- finds itself lonely, weak, and unsupported in time of crisis"

Schlesinger goes on to make some predictions about the future Canadian family:

- The family will spend less time in child-rearing; more day care centres will look after children.
- Canadians will marry later and have fewer children.
- The family will have more years of freedom from child-rearing, i.e. childless
- The family will have a longer time in empty-nest stage. That is, husbands and wives will spend more time together after the children have left home.
- Canada will have more working women.

- Premarital and extra-marital sexual relationships will become more acceptable by society.
- We will have sex and family life education in schools.
- We will have fewer "poor families", through tax equalization.
- We will have more active family planning--resources, clinics, etc.
- We will have more aged people living in Canada.
- We will have more day care services -- for all social classes -- including industry day care services.
- We will have more living in urban areas in apartments and family complexes.
- We will have more divorces and remarriages. Divorce will be available from Family Court.
- We will have "Family Bureau" as part of the Department of Health and Welfare.
- We will have travel and transportation changes -- more children away from home.
- We will have trial marriages -- a five-year renewable contract.
- Less emphasis will be placed on security and more on self-actualization.
- There will be more togetherness, and more apartness.
- We will need each other because "we love each other", not for economic reasons.
- The family will be the basic social unit.
- We will have more emotionality and intimacy in family.
- Family will be a buffer against a complex and demanding world -- one of the few places where we can find privacy.
- We will have more variation in family living -- more communal living, extended kinship patterns.
- We will have a change in the way family members view each other -- not in terms of power relationships, i.e. head of household, etc.
- We will learn from our children.
- Women will refuse to be subservient to men.
- Sexual life will be better, healthier, normal.
- Less emphasis will be placed on "sex act" and "orgasms".
- We will see more homosexuality.
- Mothers will be working more to "fulfill themselves", rather than for "extra income".

3. The Problem of Alienation and Loneliness - An Alternative Viewpoint

The preceeding two sections tend to portray social change in a positive and optimistic tone. However, social evolution has occurred in some instances at a note which more aptly is described as revolutionary rather than evolutionary.

In "Future Shock" Alvin Toffler contends that human exposure to too much change in too short a period of time portends the possibility of widespread stress and disorientation;

"Unless man quickly learns to control the rate of change in his personal affairs as well as in society at large, we are doomed to a massive adaptational breakdown."

Individuals have traditionally been sustained by their families, school-mates and neighbourhood groups. Changes in the family and in society have left many persons isolated from these essential supports. In addition to the weakening of identity with the family, they live in a society that is multiplying rapidly in numbers, is highly mobile, both socially and geographically and that is characterized by short term relationships that have been described as depersonalized.

Christopher Alexander, in an article titled "The City As A Mechanism For Sustaining Human Contact" quotes Homans (1950) as follows:

"In the old society, man was linked to man; in the new agglomeration -- it cannot be called a society -- he is alone. All the evidence of psychiatry shows that membership in a group sustains a man, enables him to maintain his equilibrium under the ordinary shocks of life, and helps him to bring up children who will in turn be happy and resilient. If his group is shattered around him, if he leaves a group in which he was a valued member, and if, above all, he finds no new group to which he can relate himself, he will, under stress, develop disorders of thought, feeling, and behavior. His thinking will be obsessive, elaborated without sufficient reference to reality; he will be anxious or angry, destructive to himself or to others; his behavior will be compulsive, not controlled; and, if the process of education that makes a man easily able to relate himself to others is itself social, he will, as a lonely man, bring up children who have a lowered social capacity. The cycle is vicious; loss of group membership in one generation may make men less capable of group membership in the next. The civilization that, by its very process of growth, shatters small group life will leave men and women lonely and unhappy."

Alexander goes on to state his own hypothesis:

"An individual can be healthy and happy only when his life contains three or four intimate contacts. A society can be a healthy one only if each of its members has three or four intimate contacts at every stage of his existence."

His definition of an intimate contact is one between two individuals in which they reveal themselves in all their weaknesses, without fear.

Alexander believes that the "historic mechanisms which once performed this function for a society are breaking down.... we are not faced with the collapse of one or two social mechanisms, but with a massive syndrome, a huge net of cause and effect in which the breakdown of primary groups, the breakdown of intimacy itself, the growth of individualism and the withdrawal from the stress of urbanized society are all interwoven." He refers to this syndrome as the autonomy -- withdrawal syndrome.

"Stress forces people to withdraw into themselves; autonomy allows them to. Pushed by stress, pulled by autonomy, people have withdrawn into a private world where they believe that they are self-sufficient.... I believe this syndrome is the greatest threat to social human nature which we face in this century."

Current tendencies towards individuality as described in the previous section are viewed by some as a facade. In a paper prepared for this study, a specialist in community mental health stated the position that man's "Present sense of powerlessness reflects in an over-arching egoism, a do-your-own-thing and do it now, freedom of expression, attitudinal complex that is the overlay of fear. His lifestyles and his hedonistic values reveal a desperate wish to escape encroaching doom".

The position can also be taken that the individual freedom so desperately sought today will produce loneliness, meaninglessness and despair. For as man achieves greater freedom, he will discover that freedom is, in its essence, not simply a freedom from bondage impaired by others. The end point of freedom is not idyllic pleasure but the absence of security.

By personal choice, most adults are not free from spouse, job, rules, and numerous other obligations and constraints. They choose not to be free because these things offer security. The choice is not between freedom and bondage but between freedom and security.

And what is (freedom) but fragments of your own self,
Would you discard that you may become free.....

The Prophet 1923

The foregoing presents a paradox. Values appear to be shifting towards individualism, self-identity, self-expression and self-actualization as described in section one. However, to overcome current problems of alienation and loneliness, group values and community values must be stressed.

Reconciliation may lie in a view of man as a social being that requires apartness as well as togetherness, solitude as well as inter-action, privacy as well as community. To consider either one or the other as having a priority may well be an error.

If I am not for myself, who will be for me?
If I am for myself only, who am I?

Talmud

C. CURRENT AND EMERGING APPROACHES TO HUMAN DEVELOPMENT SERVICES

1. A General Overview

a) The Current Situation

The present state of the art of such diverse fields as health, education, culture, the social services, and spiritual matters can be described as moving from pre-scriptive to enabling. All of these aspects of man's efforts to cope with himself, his fellow man and his search for meaning and expression are grappling with similar pressures and tensions. Human services are presently responsive to increasingly complex urban patterns, cyclic and technological unemployment, loss of personal integration and integrity. They are anticipative of increased social turbulence, more intensive governmental involvement and the development of more complex problems.

The individual social disciplines and their supportive institutional frameworks continue to pursue separate pathways for the most part. And yet these systems are developing similar vehicles for packaging and delivering their specializations. Within each system, there are efforts to determine gaps and integrate existing services. In addition, service planners are providing more rationale for the accessibility and involvement of their consumers.

b) Emerging Themes

There are several major emerging themes that run consistently throughout developments in these fields. Participation of the client in the delivery of services is an

important feature. Increased emphasis is being placed on planning to anticipate changing needs and upgrading services. As well, localized, decentralized team approaches to problem solving can be found in all fields of human services. The expansion of coverage for these services from sectorial to universal, and from by privilege to by right, denotes a major thrust in all fields. Finally, all disciplines are interested in combining their methodology and approaches in order to combat the ever increasing need for human service.

2. Trends in Traditional Services

a) Health

i) Major Themes

The prime thrusts point in the direction of more freedom of choice for both patient and the professional; universal coverage and the creativity of health care. In addition, the encouragement of consumer participation in the assumption of responsibility for health care is given considerable attention. The position that health care is a privilege has been abandoned and health care theorists maintain that health care is now a universal right. Moreover, the scope of health care has been considerably enlarged.

ii) Processes

More mechanisms are being developed to encourage localized and participatory health services. The general practitioner is returning and strong emphasis is being placed on training the practitioner in total health care concepts. With the fast rising costs of health care, there is an effort to optimize the investment among therapeutic, rehabilitative and preventative medical facilities. The literature encourages a team approach with the patient's personal physician co-ordinating the delivery of health services.

iii) Structures

Community health centres are the single most widely discussed structure. These centres must be acceptable accessible and attractive to encourage patient visits. Operating out of these centres, mobile crisis intervention teams will detect and refer cases to the centres and then to specialized services when required. Multi-functional facilities are envisioned that can reduce the pressure on the large institutions when needed and act in different capacities when this pressure alleviates.

b) Culture and Leisure

i) Major Themes

The major theme in both these fields is the availability of choices to promote individual growth and development. These choices can be both creative and non-creative, and relate to mixes of age, ethnic and social type. Emphasis is placed on the fulfillment of human needs such as belonging, esteem by self and others.

ii) Processes

A spasmodic or intermitent exposure to leisure and cultural opportunities is not to be encouraged. Rather continuous, life long experimental and intensive exposure is to be promoted. The goals of these two fields are not in the outcome achieved but in the persons and processes developed through the pursuit of leisure and cultural activities. The Participation of the community in promoting and enjoying these activities is to be facilitated. Their stimulation through a system of grants and encouragement of volunteers will enhance the participatory nature of both leisure and culture.

iii) Structures

A variety of centres that permits cultural and leisure activities are desirable. Informal, spontaneous opportunities for interaction are all characteristic of these centres. Indicated as well are a range of enterprises that reflect cultural and leisure interests.

c) Education

- i) Increasingly, educational theorists are emphasizing both the need and the demand for life long learning opportunities. This can be seen in the adult education programs, the variety of retraining courses and a myriad of less formalized, interest oriented seminars, study groups and workshops. With this increasing pressure in educational institutions, there has come a movement out of and away from the institutionalization of education towards setting the locus of the learning experience and environment within the broader community. In fact the learning experience is being seen as contiguous with life itself. Hence the phrases learning for living and living for learning have become maxims for current educational planning. The other major orientation in education is a trend towards the art and discipline of learning with less

emphasis on the procedures and practises of teaching. This can also be seen in the current educational ethic of encompassing human needs in learning goals. As in other fields educationalists are in general moving the locus of the learning experience out of the institutions and programs towards the needs of people at different phases and stages of their development.

ii) Processes

Consumer involvement or student participation is finding its way into the planning and implementation of educational programs. This can be seen at the boards of education, the ministries of education the local and school level. In part this is a concern for spiralling costs on the part of the taxpayer but it is also a thrust from the institutions themselves. Increasingly, citizens are participating in the setting of goals, the instruments of evaluation and the processes of education. As mentioned earlier, there is a decreasing emphasis on institutions as the locus for learning towards placing educational opportunities in a variety of temporary, flexible, more open ended structures. Perhaps the most dramatic but not yet fully exploited instrument for transmitting information is the media. The entry into education of many forms of media in a major way will increasingly be a pre-occupation of educators and students. New formats for teaching include new type of personnel as well. Specializations are becoming more common and para-professionals are also being employed more extensively in the educational systems.

iii) Structures

The single most dominant feature in the literature and in practice in this field of education is the flexible, multi-use structure. Evidence of this can be found in the rapid increase of community schools, information resource centres, and increased sharing of space and resources of education, health and other human services. Space is being seen as the locus for many purposes of which education can and should be integrated with other orientations. The other major development in structures is a movement towards the expansion of communication methods or knowledge banks. Here the student hooks up with information centres through a range of communication systems to receive the data required.

d) Social Services

i) Major Themes

The social services are moving from an orientation generally characterized as reactive to a more anticipative position. Prevention is being stressed in the literature. From an earlier emphasis on symptomology, there is developing an effort to eliminate the causes of social disfunctioning. Formerly and still to a more limited extent, services and institutions were set up for persons with common problems. There are more efforts now directed at integrating these categories of persons into the mainstream of society. A major thrust in all social services is towards tailoring them to fit the needs of individuals, making them more acceptable and accessible. In the provision of these services, an interdisciplinary approach is frequently being adopted. Lawyers, doctors, social workers and other professionals work in teams often in a decentralized office using their headquarters for consultation, referral and more specialized services. Perhaps the most significant trend in the social services is away from consideration of clients as morally handicapped. Rather the concept of services as rights with universal coverage is emerging.

ii) Processes

As in the field of education, there is an increasing effort in the social services to develop mechanisms that permit a variety of services. More facilitating mechanisms like drop-in and information centres are being developed to assist citizens in reviewing the appropriate services. As these services develop, frequently social animation is used to tailor them to the needs of the particular community or to strengthen community involvement. In fact, if there is a single theme that dominates in the social services, it is participation by the recipient or client in the development of appropriate goals, services and regulatory mechanisms. For all this to be accomplished, a more generalist type of social worker must be trained with skills in many areas.

iii) Structures

The most compelling feature in this field is the development of flexible, multi-use, decentralized structures that deliver a range of services in which the client chooses those that fit his needs. As well, governmental involvement in the delivery of social services has and will continue to increase. Halfway

houses, information and referral centres, and multi-service centres are all becoming more prevalent and exemplify the move away from bureaucratic, large scale institutions. Funding is being developed to permit self help groups participate extensively in the delivery of services and the planning for innovative social service delivery systems.

e) Spiritual

i) Major Theme

The major theme of the institutional church is to raise man's level of consciousness. Towards this end, two main goals are evident. The individual focus is through worship. Man is urged to move in a continuing evolution towards the image and likeness of God. Mission is the second major thrust which places the individual in a social context where man is urged to communicate and share his faith.

ii) Processes

Three major trends appear in this field. Multiple staff ministries - where counselling, preaching and animating are provided by an interdisciplinary team of clergy is one major trend. The lay ministry is receiving greater emphasis as well. This is considered a secular reserve pool for use as the clergy and the laity decide. The final trend is a movement towards more eccumenical services where facilities, resources and personnel are shared in secular events.

iii) Structures

As with the other human services, there is an increasing effort to localize and develop flexible, multi-use, facilities. Co-operative and campus ministries are receiving considerable attention. In addition the trend towards moving the institution out into the community will continue with the clergy performing secular and spiritual roles. Meditation and spiritual encounter centres are being urged with access permitted to believers and non-believers.

D. THE RANGE OF OPTIONS AVAILABLE

The range of social options to be considered are several. At this stage of the study, they can be grouped according to five categories: individual, social, community, human development services and planning.

1. Individual

A Community can provide a wide range of choice in all aspects of life which for some would be stimulating and enhance their growth as individuals. For others, however, the same wide range might "overload" their personal decision-making capacity and create stress, leading to withdrawal and isolation.

A social system which is unstructured and non-committal (be it family, an educational institution or form of employment) offers for some a freedom which facilitates self-expression and creativity. For others, it signifies a loss of security and a search for rules, norms and guidelines.

For some persons, the desire for privacy has dominance in their pursuits for satisfying experiences or to withdraw from excessive stimuli of their daily life experiences. For others there may be a lack of stimulation or a predominant tendency for gregariousness which can only be satisfied through inter-action and community.

2. Social

North Pickering might be designed to attract a fully heterogeneous (pluralistic) population with a full mix of people by ethnicity, economic attainment, education level, religion and styles. This would offer a wide range of values and a rich diversity of life to be experienced.

Or, North Pickering might be designed to attract a predominantly middle class population within a narrow range of education levels and which basically shared common values. This would provide greater "security" for those who lived there and shared values would facilitate participative planning and decision-making.

A number of goals will be enunciated for North Pickering. Some of these goals (ideally all of them) will be mutually re-enforcing but others will require trade-offs and therefore a set of priorities. The basic tri-polar trade-off "set" will be:



What then, becomes the priority within this set?

3. Community

Similarly, there will be needs, desires, and goals as perceived by the residents of North Pickering.

However, North Pickering is but one component of a region, a sub-component of the Province and a sub-sub-component of a nation. To what extent do North Pickering goals have priority to the goals of the broader society of which it is a part and vice versa?

Also, there are residents currently living in North Pickering. Some of their aspirations, needs and desires will coincide with or complement the aspirations of future residents. However, some may be in conflict. Future plans might be designed for one population set or the other or strike a compromise.

Public housing is a need for a significant segment of the population, yet we are still searching for the best way of integrating public housing into a community. North Pickering presents an ideal opportunity to search out a solution to this societal need. How can we move in this direction with the acceptance of those who may be private home owners in the same Community?

4. Human Development Services

Current studies of human development services, experiments and pilot projects have indicated a trend towards comprehensive multi-service centres. However, there remains a lack of agreement as to what is comprehensive. Is it within one service function such as health? Is it health at the centre supported by peripheral social services? Is it health at the centre supported by a constellation of services including social, legal and recreation? Or is it a broad spectrum of services in consortium and mutually supportive with none being central?

Are diverse services such as recreation and welfare compatible under the same roof or does one give a stigma to the other?

One viewpoint puts emphasis on the design of fully integrated human development services including education, recreation, health, social and legal services. Another is that recipients of services should have a choice and this is not possible in a fully integrated system.

Human development services can be provided completely by government (public) or completely by private agencies and individuals or a combination of both.

The provision of services can be centralized organizationally at a municipal or regional level thereby guaranteeing a standard and uniform quantity and quality of service. Or services can be decentralized organizationally to the neighbourhood level (within economic constraints) thereby enhancing public participation, flexibility and faster response to new needs.

Human development services in North Pickering can build on existing services of the area, expanding as required. On the other hand, an argument can be put forward that here is an opportunity to design an optimal system, free of traditional constraints.

5. Planning

The current emphasis in planning is to encourage citizen participation at all stages and in all aspects. The complexity of society and increasing awareness of fragile ecological systems requires at the same time that planning be comprehensive. Is it possible to merge the need for comprehensive planning with the relatively focalized concerns of interest groups?

Certain facilities, programs and services might be desirably "in-place" on arrival of the first residents to North Pickering. On the other hand, the space for these facilities can be set aside and left for the residents to determine the type of services and facilities desired.

Long range planning may be required to a certain degree to ensure the proper linkages of transportation systems, open space systems, hospitals, educational institutions, etc. On the other hand, the emphasis can be on maximum flexibility in order that needs can be met as they arise and in a manner determined by local residents.

Table B provides a summary of these options. Others are likely to arise as the study continues.

TABLE B: THE SPECTRUM OF SOCIAL OPTIONS

Individual

Wide range of choice	vs	Limited choice
Stimulation	vs	Stress
Freedom	vs	Security
Privacy	vs	Community

TABLE B: THE SPECTRUM OF SOCIAL OPTIONS (cont'd)

Social

Mixed population (heterogeneity)	vs	Uniform population (homogeneity)
Wide range of values	vs	Shared values
Priority to social goals	vs	Priority to economic goals
"Man-Centred" community	vs	Man viewed as part of total natural ecology

Community

Priority to desires of N. Pickering residents	vs	Priority to regional goals
Goals of N. Pickering	vs	Needs of society at large
Public housing as part of community	vs	Private housing exclusively
Desires of current residents	vs	Desires of future residents

Human Development Services

Comprehensive services system	vs	Specialized system
Privately offered services	vs	Public services
Integrated services	vs	Opportunity for choice
Centralized uniform services	vs	Decentralized local orientation
Build-on current services	vs	Design new service system

Planning

Certain facilities and services in place	vs	Determination of services and facilities by residents
Comprehensive planning	vs	Focalized issues of interest groups
Long range planning	vs	Flexibility and meeting of needs as required

NORTH PICKERING
COMMUNITY
DEVELOPMENT
PROJECT

ECONOMIC DEVELOPMENT BACKGROUND PAPER NO. 1:
FACTORS AFFECTING THE POTENTIAL FOR
ECONOMIC DEVELOPMENT OF THE NEW COMMUNITY

NORTH PICKERING COMMUNITY DEVELOPMENT TEAM
MINISTRY OF TREASURY, ECONOMICS AND INTERGOVERNMENTAL AFFAIRS

PLANTOWN CONSULTANTS LIMITED

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A. OPPORTUNITIES FOR ECONOMIC DEVELOPMENT

North Pickering will require a strong economic base for two major reasons: (1) the creation of job opportunities for its residents; and, (2) the provision of retail and other services for the convenience of local residents. From the provision of facilities to support employment and services will flow a balanced property tax base.

A preliminary survey of the North Pickering situation indicates that potential exists in the primary, secondary and service/commercial sectors; but existing activities are extremely limited and most employment opportunities must be provided by new enterprises. At present, agriculture is the principal primary industry, but a large amount of the agricultural land is not in production. Other significant operations are mushroom plants, a wood products plant and various retail and other enterprises.

With respect to new industry, opportunity is virtually unlimited. All of the location requirements for successful industrial development will be available. These include:

1. Proximity to major Canadian and U.S. markets;
2. An adequate supply of land with suitable physical characteristics;
3. Availability of superior road, rail and air transportation facilities including possible direct access to Port facilities;
4. Adequate services, utilities and communications networks;
5. Proximity to major existing industrial concentrations in both Metropolitan Toronto and Oshawa with a wide range of essential industrial service establishments;
6. Access to good commercial and institutional establishments;
7. The prospect of an urban centre of outstanding amenities in relation to the natural assets of the Project site.

As the community grows from its present population to its target level of about 200,000 people, its economic base will change dramatically in diversity as well as scale. The two main areas of economic activity will be: (1) the "dependent" group of activities such as retail and service activities designed to serve local residents; and, (2) "independent" operations of an industrial and commercial nature that are geared to outside markets.

It is not foreseen that the community will be self-contained or insular. A high degree of in and out migration to work is expected to occur. However, an objective of the Project is a net zero balance, that is the number of residents travelling to jobs outside the community should be equal to the number of persons living outside the community moving to employment in North Pickering. The community's economic development will be influenced by three prime considerations. These are its situation in relation to (1) Metro Toronto, (2) the new Toronto Airport, and (3) the Oshawa-Centred Region.

1. North Pickering in Relation to Metro Toronto

The growth of the economic base of Metro Toronto has been dramatic in terms of the magnitude and character of industrial activity. Industrial development officials have experienced a steady growth in existing establishments and a stream of potential new industries. As a result, there has been little necessity for the industrial promotion that characterizes communities in slow growth areas. The principal problem has been the provision of serviced land in sufficient quantity to meet the demand. As available industrial land has become limited in supply there has been a tendency for more "footloose" industrial establishments to seek sites in more remote locations.

The economic base of Metro Toronto is extremely diversified. There are no dominant industries. It incorporates almost every type of industry found in the Canadian economy. Small, medium and large secondary manufacturing firms are found as well as a wide range of commercial and service industries. Financial, service, governmental and institutional operations are extensive. It is characterised by economic activities with significance at the local, regional, provincial and national levels. Many years ago it reached the "critical mass" required to ensure its capability to generate new growth in employment opportunities for sustained periods of time without any special inducements.

This has resulted in the establishment and growth of related and supporting, economic activities throughout a region of influence extending from Hamilton to Cobourg and from Lake Ontario to Lake Simcoe. Metro's ability to generate economic activity over a widespread area presents a potential that could be of outstanding benefit to any major centre of urbanization within its sphere of influence.

In view of the proximity of North Pickering to Metro Toronto, therefore, there should be a strong demand for serviced industrial land there. Thus, the continuing growth of secondary and distribution industries as typified in Metro Toronto should represent "an economic opportunity" for North Pickering.

A preliminary analysis of industrial location factors previously referred to indicates no serious disadvantages for North Pickering relative to comparative industrial locations in the Central Ontario Region. Therefore, the development of the economic base of North Pickering relative to Metro Toronto will be highly influenced by the planning, servicing and support services. They will determine the rate and character of economic development relative to Metro Toronto.

2. North Pickering in Relation to the New Toronto Airport

The new Toronto Airport will have an important influence on the economy of North Pickering. On the one hand, it will set physical and environmental constraints that will determine to some degree the nature of economic activity in the Town; for example, noise zones must be taken into account. However, the major influences will be on the opportunity side. The extent and nature are dependent on the character and timing of the airport. However, observation of economic activity adjacent to other airports in major Canadian, U.S. and European cities suggests the nature and magnitude of the potential. Commercial and industrial activity geared to passenger and cargo traffic plus airport oriented operations such as food services are probable.

Some of the early studies by the Federal Ministry of Transport concerning the Toronto Airport situation estimated that airport-related employment in the Toronto area would exceed 60,000 persons either directly or indirectly by the end of the 1980's.* Of that total, it was crudely estimated that between 25% and 35% would be directly employed in the air transport industry with the remainder representing employment in activities related or induced.

It was then estimated that more than half of the airport-related employment would be situated at the New Toronto Airport with the remainder at the existing

* Source: Toronto Area Airports Project Team, April 20, 1972;
The Economic Impact of the New Toronto Airport.

Toronto International Airport. There have been various developments since the publication of the studies and it is not known whether or not these estimates are still valid. However, they do provide an order of magnitude of estimate of the impact of the New Toronto Airport.

It is expected that the effects of the airport will begin to occur as soon as construction commences. A construction labour force likely in excess of a 1,000 workers will be required on the airport site* as well as on servicing, utilities, communications, and road works to the airport site. This labour force alone quite apart from the construction labour force that would be involved on the New Community site, will likely generate increased markets for housing and commercial services over a fairly wide-spread area.

Actual airport employment will be dependent on the ultimate role and rate of development of the airport since the number of employees required is related to the volume of air traffic and its type. The crude preliminary forecasts mentioned previously indicate that it will likely be of a substantial magnitude. As with the construction workers these employees will similarly generate demand for housing, commercial and institutional facilities and services.

An examination of the economic impact of other major airports has shown that they are likely to generate substantial development of airport related activities. One of the most conspicuous is hotels and facilities catering to the travelling public.

Again, on the basis of very crude preliminary estimates it has been concluded that over two-thirds of the employees working at or in the vicinity of the new airport will reside in the area extending from Scarborough to Oshawa.

Thus, it is expected that the New Toronto Airport will present opportunities for economic development not only in its immediate vicinity and on the North Pickering Community Development Project site but also throughout the area extending from Scarborough to Oshawa.

* Source: Toronto Area Airports Project Team, April 20, 1972;
The Economic Impact of the New Toronto Airport.

3. North Pickering in Relation to the Oshawa-Centred Region

As part of its regional planning policy, the Province has designated Oshawa as the regional centre for the area to the east of Metro Toronto. North Pickering is to be a complementary community to Oshawa.

Elsewhere, the concept of complementarity between urban places in the Region is more fully discussed. This concept will require blending with the development opportunities inherent in the construction of the New Toronto Airport and the proximity of Metropolitan Toronto, as well as with an assessment of the existing economic base and growth potential of the Oshawa-Centred Region.

B. CONSTRAINTS TO ECONOMIC DEVELOPMENT

1. Competition with Other Centres

Despite the locational advantages of the North Pickering Community Development Project site, it must be remembered that many other urban centres presently under development in Southern Ontario enjoy similar attributes. Many of these are already well advanced and provide for the accommodation of growth in virtually the same time span as does the New Community at North Pickering. This competition of the New Community with other centres having a time and developmental advantage could present a constraint on the capability of the New Community to attract economic activities. The degree to which this competition becomes significant is dependent upon the rate of growth (or non-growth) of Southern Ontario.

2. Commencement, Type, and Rate of Airport Development

Mention has already been made of the potential catalytic effects which the New Airport could have on stimulating economic development over a fairly broad region. The nature and extent of the economic impact will be directly related to the type and rate of development of the airport. As this impact relates to the North Pickering Community Development Project specifically, timing of the airport development will be of paramount importance.

3. Project Objectives and Policies

The objectives and policies established for the Project could provide self-imposed constraints on the community's economic development. If the community wishes to create and maintain an independent or unique character, then this policy would restrict many of the economic activities that might naturally be drawn to the community's industrial and commercial areas (by virtue of the airport or the Metro Toronto demand for serviced land).

C. ECONOMIC DEVELOPMENT OPTIONS FOR NORTH PICKERING

The economic base of North Pickering will consist of two elements: (1) the economic activities necessary to supply local residents with the goods and services that they require; and (2) industrial and commercial operations geared to markets outside the community.

Apart from the locally oriented operations, three major economic roles appear to be open. These are:

1. Mixed Economic Base

Such a role would provide North Pickering with an economic character similar to that of Metro Toronto. This would be a heterogeneous mix of industrial and commercial operations involving small, medium and large sized firms with no major industry playing a dominant role.

2. Airport Oriented Economic Base

Such an economic base would have a special character due to its airport focus. However, the rate, role and extent of airport development in relation to that of the New Community would determine the degree of airport dominance of the economic base.

3. A Selective Economic Base

This type of economic base would consist of industries which would yield the "essential" economic requirements such as sufficient employment and an adequate tax base as well as additional social and economic benefits regarded as desirable. These added benefits might include flexible working hours or above average incomes.

The New Community at North Pickering is being brought into existence by the Government of Ontario to contribute toward the effective and successful implementation of the Toronto-Centred Region Plan. The Government will have option of exercising varying degrees of control in all aspects of the community's development including the structuring of its economic base.

It could on the one hand allow market forces to take their course resulting in either a mixed economic base or an airport oriented economic base as outlined in paragraphs 1. and 2. above.

On the other hand, it could exert a great deal of control and selectivity as a means of achieving a variety of social and economic objectives such as:

- a) A desire to maximize employment opportunities for women, the disabled, the elderly or any other special segment of the population;
- b) A desire to limit industrial development only to those types meeting extremely high standards of atmospheric, soil or water pollution control;
- c) A desire to maximize the role of North Pickering as a centre for tourism and recreation of significance not only at the regional and provincial levels but also at the international level as well;
- d) A desire to maximize the role of North Pickering as a distribution centre of regional, provincial or international significance; or
- e) A desire to develop a unique role for North Pickering with provincial, national or international significance in such areas as higher education, cultural development, or facilities for conferences, conventions and training.

These represent but a few of the options available for the development of a highly selective economic base in the New Community.

Studies currently under way are designed to reveal the potential that could accrue to North Pickering in terms of economic activities should a selective approach be taken. The potential from this approach will then be compared with the results anticipated from a mixed or an airport oriented base.

NORTH PICKERING
COMMUNITY
DEVELOPMENT
PROJECT

ENVIRONMENTAL PLANNING BACKGROUND PAPER NO. 1:
CHARACTERISTICS OF THE SITE AND OPTIONS FOR ITS DEVELOPMENT

NORTH PICKERING COMMUNITY DEVELOPMENT TEAM
MINISTRY OF TREASURY, ECONOMICS AND INTERGOVERNMENTAL AFFAIRS

PLANTOWN CONSULTANTS LIMITED
SEPTEMBER 1973

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I INTRODUCTION

A prime goal of the North Pickering Community Development Project is to design a new community that utilizes the full potential of the existing natural environment (1). In this regard, environmental studies have focused on the opportunities and constraints of the site with a view to guiding decisions that will enable the community and the environment to be melded as practicably and as tastefully as possible. It is anticipated that input from the public and other interested parties will also aid the decision-making process.

A broad spectrum of land-use opportunities are presented by the North Pickering site. In choosing from among them, environmental data will be weighed according to an evaluation scheme that considers such factors as aesthetics, engineering suitability, construction and restoration costs, and ecological, recreational and historical suitability.

A wide range of environmental studies have been undertaken by a number of private and Federal and Provincial Governmental Agencies. Relevant data, particularly in the field of hydrology, is also being obtained from beyond the boundaries of the North Pickering site (3,8,9). The studies are listed in Table 1.

This paper is intended to give a preliminary inventory of the characteristics of the North Pickering site as well as to initiate consideration of some of the broad options available for environmental planning.

* All references noted in the text are listed at the end of this paper.

TABLE 1
ENVIRONMENTAL STUDIES

The Natural Physical Element

- a) Structural Geology
- b) Drainage Courses
- c) Soils
- d) Surface Run-off
- e) Water Quality and Quantity
- f) Ground Water
- g) Meteorology
- h) Air Quality
- i) Microclimate

The Biological Element

- a) Vegetation
- b) Birds
- c) Mammals
- d) Habitat Quality
- e) Aquatic Environments

The Human Element

- a) Settlement History
- b) Oral History
- c) Buildings of Historical and/or Architectural Significance
- d) Sites of Archaeological Significance

- e) Existing Land-use
- f) Parkway Belt Concept
- g) Existing and Anticipated Major Open Spaces
- h) Land Capability for Urban and Recreational Uses
- i) Land Capability for Agriculture
- j) Environmental Character Analysis
- k) Identification of Environmentally Significant Areas
- l) Constraints Imposed by Utilities
- m) Noise Sources
- n) Constraints Imposed by Airport Operations

II. ENVIRONMENTAL OPPORTUNITIES

A. THE NATURAL PHYSICAL ELEMENT

The sub-surface soil of the project site consists of glacial sand, till, silt and granular over sedimentary bed-rock (2). It is generally good engineering material. The bed-rock outcrops near Decker's Hill, but otherwise is likely too deep to be encountered during construction. The property slopes southward with a gradual drop of 400' over about 6 miles. Four basic relief regions are recognized (2) (Map EN 1).

1) West of West Duffin Creek: The terrain consists of gently undulating till planes and drumlins with slopes that seldom exceed 5%.

2) East of West Duffin Creek: The terrain is hilly and distorted due to a suspected buried moraine. Hills can be 50-100' high and some slopes exceed 10%.

3) The relatively flat beach of ancient L. Iroquois which is demarcated by the 450' contour, the former shoreline.

4) Drainage courses: The North Pickering site is served by a pattern of 6 catchment areas and is generally well drained. The more significant water courses are the Rouge River, Little Rouge Creek, the tributaries to Petticoat Creek, West Duffin Creek along with its tributary to Clarks Hollow, and the tributaries of Duffin Creek. Each stream can have a broad valley with steep walls that are made unstable by ground water seepage and stream undercutting.

The surface soils of the North Pickering site are being studied in detail with the emphasis on fertility, depth, and engineering suitability (erosion characteristics, support potential, slippage, and permeability) (4,14). These properties are important as they determine vegetation types, and hence ecosystem characteristics, and land-use potential as regards, for example, feasibility for farming, reforestation, nurseries, parks and construction.

The pattern of surface water run-off over the North Pickering site is determined by the interplay of slope and soil permeability. Construction activities such as cutting and filling operations and the elimination of minor streams make changes in this pattern inevitable. Resultant erosion and stream siltation can be minimized by the careful implementation of routine counter-erosion measures such as the covering of surfaces denuded of vegetation.

The streams of the North Pickering site are fed by run-off and seepage. A preliminary review of chemical, physical, and bacteriological water monitorings conducted over the past two years at numerous stations along the main drainage courses indicate that the water quality is good (8). Such monitoring will be continued to assure that construction effects on water quality are kept minimal.

Over most of the North Pickering site, the ground water table is well below the surface and is unlikely to affect land-use (2). Scattered over the site, however, are a number of drainage sloughs (low lying wet areas), some of which are seasonal (Map EN 2). The ecological significance of some of the sloughs will probably warrant their preservation. The remaining sloughs can be recommended for alternative uses, dependent upon detailed studies of the depth of their organic cover and the feasibility of their being drained. Present indications are that the water table over the southeastern part of the site can lie close enough to the surface that it could affect land-use, especially where excavation is required (Map EN 2). Further study will characterize this region more precisely.

Studies of the meteorological history of the North Pickering site will determine the drainage measures necessary to safeguard the future community against damage due to excessive precipitation and snow-melt. Air quality studies of the site will establish a base-line against which subsequent monitorings can be compared to assure good air quality for the North Pickering residents. Changes in microclimate (temperature, wind pattern and speed, light quality, etc.), affecting the ecosystem are inevitable with urbanization and result, for example, from altered surface features and water table levels. Studies and recommendations to minimize the effects on the North Pickering site will be best implicated as the community design takes shape.

B. THE BIOLOGICAL ELEMENT

Intensive surveys of the flora and fauna and their habitats within the North Pickering site have already yielded useful results to assist in tentatively identifying regions of the property that should be retained in a natural or semi-natural state (5-7) (Map EN 3). The feasibility of restoration is also being investigated. It is clear that the North Pickering site has much to offer from a biological standpoint. Its varied topographical relief provides a variety of microclimates for diverse arrays of species. The natural areas most likely to be left intact are those with the greatest biological potential, i.e. the larger wood lots, old fields, and stream environments. The larger wood lots, many of which border on the main stream courses, are indicated on Map EN 3.

The ecological value of each significant wood lot and old field on the North Pickering site is being determined on the basis of surveys of its vegetation, birds, mammals, and habitat quality for animals. The study parameters for the plants and animals are the variety and abundance of different species, the species diversity index, and the presence of uncommon species and unusual species complexes. The study parameters for habitat quality are the availability of summer and winter food and cover, the proximity of water, the presence of edge value and interconnection between adjacent natural areas, and the degree of disturbance by man. Stock is also being taken of the water fowl of the North Pickering site. On the basis of this evaluation, prudent decisions can be made on the suitability of the various natural areas for conservation, restoration, recreation, or development.

Studies of aquatic life in the major streams and ponds of the North Pickering site are emphasizing fish with a view to using some of these waters for public fishing. Invertebrates and aquatic plants are also being surveyed as they are sources of food for the fish. Brook trout are found in the cooler waters of a tributary of Duffin Creek. Elsewhere, the water is warmer and sustains a variety of other species, including sunfish, large and small mouth bass, suckers and minnows. Where feasible, every effort will be made to conserve the biological resources of the North Pickering site. In this regard, it may be necessary to exercise control over such "nuisance" animals as skunks and racoons that are drawn to the community in search of food. Similarly, aircraft safety considerations may require controlling the availability of food, shelter, and nesting sites for birds along the northern margin of the North Pickering site.

C. THE HUMAN ELEMENT

Historical studies of the North Pickering site and environs reveal an interesting human legacy (10). Tangible evidence of the activities and evolving cultural patterns of the Indians of the area extends back over 1,000 years. White settlers began arriving in the late 18th century and some of their descendants still reside in the area. The early settlers established homesteads, small industries, and the towns of the area, and played a significant role in the early development of the Toronto region. In this regard, a survey of the North Pickering site is being conducted to evaluate the status of its archaeological sites and the historical and/or architectural significance of some of its buildings and industries (11-13) (Map EN 4). Recommendations are forthcoming on the archaeological sites suitable for preservation and subsequent excavation and the buildings suitable for preservation, restoration, and possible relocation.

Traditionally, the land of the North Pickering site has been used primarily for mixed farming. Government soil surveys rate the area as Class 1 agricultural land, i.e. highly productive and suitable for a wide range of field crops (14). None the less, a sizable portion of the land has experienced only light agricultural use, but this is often explained by the impracticability of tilling slopes and soil that is poorly drained or stony. The land-use history (burning, grazing, logging, etc.) of the site is important as past practices can have significant effects on the future potential of the land.

Future land-use designation within the New Community site can now be considered. The Toronto Centred Region Plan calls for a broad parkway belt along the western and southern edges of the New Community site (Map EN 4). This open space can be suitably used for transportation and utility corridors, recreation, camping, etc. As regards the remainder of the site, it is possible with the present level of awareness of the assets and constraints of the site to take a more objective look at land-use options. Using evaluation criteria such as those mentioned previously, exercises are currently underway to tentatively identify regions of the site most suitable for natural preserves, urban development, recreation, farming, open space parkland, and agriculture.

III. ENVIRONMENTAL CONSTRAINTS

A. THE NATURAL PHYSICAL ELEMENT

Several topographic features of the North Pickering site could affect urban design possibilities due to engineering and cost considerations. Development on slopes exceeding 10% (Map EN 2) will require careful engineering management to reduce erosion that could silt the streams. The increased cost of construction on such sites could well be offset by aesthetic considerations. The major drainage course environments will likely be left in a natural state, due in part to their ecological significance, but also to the steep unstable stream banks, the erosion problems inherent in any alteration, and the possibility of periodic flooding of the stream valleys, especially following urbanization. Non-reclaimable drainage sloughs and regions with high water tables will require special design considerations. Rehabilitation of the sand and gravel pits on the site (Map EN 4) could enhance their useability.

B. THE BIOLOGICAL ELEMENT

Hydrological changes during urbanization are inevitable and can lead to alteration of the characteristics of the ecosystem. In general, development such as will occur over the New Community and airport sites, alters surface drainage and permeability, leading to decreased ground water recharge and depressed water tables. The latter change can alter the character of the surface vegetation and hence the ecosystem as a whole. These same conditions also affect streams. Stream levels are generally lower due to the depressed water table, but because of the tendency for flash flooding to occur, peak flows are higher and cause stream erosion and siltation. The net result could be a deterioration of stream quality to the point where the more sensitive fish and invertebrate species are eliminated. In order to minimize such deleterious changes over the site, urbanization will be introduced prudently and resource management and engineering techniques employed as required.

C. THE HUMAN ELEMENT

Man's needs and activities in and about the North Pickering site can significantly affect land-use opportunities (Map EN 4). Some constraints will be imposed by sanitary land fill areas and major utility corridors and installations. Similarly, noise levels along major road and railway systems, depending upon their location and the use of baffles, could affect urban design. The northern edge of the site will receive considerable aircraft noise and will be affected by guidelines ensuring aircraft safety and unobstructed airport communications. Land usage should discourage the presence of substantial numbers of birds and should accommodate restrictions on the characteristics of buildings and activities.

Map EN 4 shows the tentative locations of the composite noise rating (CNR) contours that serve as indicators of likely future sound annoyance. Guidelines from the Ministry of Transport indicate that noise becomes increasingly bothersome above the 95 CNR contour, such that the land so impacted becomes unsuitable for residential development and some outdoor activities.

IV. ENVIRONMENTAL OPTIONS

The stereotype of development in the eyes of both the public and the conventional development organization is typically cast as consisting of opposing forces between:

1. Resource conservation and environmental destruction;
2. Agricultural production and urban development; and
3. Agricultural lifestyles vs big city "neon culture".

Mention has already been made in a preceding section of this report of the quality of the existing natural environment of the site for the New Community. For these reasons one of the objectives for the design of the New Community is to utilize the full potential of the existing natural environment.

Within the framework of that commitment a variety of options present themselves. For example, some viable agricultural farm units could be integrated into the open space network of the community and be sustained for a wide range of activities. These might include anything from garden plots for urban dwellers to locations for co-op beef production, dog training, kenneling and the like.

Orchard and berry crops, honey and maple syrup production for local markets could be developed utilizing labour garnered from new town youths working in conjunction with and under the supervision of existing, semi-retired or retired farm operators.

The cultural small-farm landscape rather than being obliterated could be melded usefully into the urban fabric providing not only for visual continuity but cultural continuity by way of a sense of history.

Such an approach could provide for low-cost or profitable maintenance of open vistas, and facilitate the management of wildlife habitat by the preservation of hedge rows, field nesting areas and the like.

Mention should also be made of the historical legacy of the natural and man-made environments of the project site. Effectively interwoven into the fabric of the community these could present opportunities for educational orientation to the regional landscape using the time sequence from Indian culture to the present.

In another vein there are additional options available with respect to the potential recreational roles of facilities in the new community or in the parkway belts that will surround it. On one hand these could be developed for the primary and almost exclusive use of the residents of the new community or they could play a major role in a system of regional open space and recreational facilities. Similarly, they could be devoted primarily to passive recreational uses or could be developed extensively for active recreational facilities.

As a case in point consideration is being given to a flood control dam on the West Duffin Creek which could produce opportunities for development of significant water oriented recreational facilities. These could be established in such a manner as to be available primarily to the residents of the new community or to the population of a substantially larger region.

Similarly, additional land in sufficient quantity is regarded to be needed over the years ahead to satisfy the demands for day use family and individual recreation activities on a year round basis. Much of this type of activity could be accommodated on lands within the North Pickering Community Development Project site because of their unique attributes and ultimately high degree of accessibility to a large concentration of population.

In that regard considerable attention has been focused recently on means of providing walking, horse and cross country ski trails of a substantial extent throughout southeastern Ontario. These are oriented primarily in east-west directions and important north-south linkages could be incorporated by means of the valley systems penetrating the new community site.

Similarly a need has been established for major tourist camping facilities readily accessible to Metropolitan Toronto and such needs could also be satisfied in the open space network of the new community.

Finally, the growth and participation of "nuisance recreation activities" such as snowmobiling, motorcycling, minibiking and go-carting has generated a requirement for land for such purposes. Since these are characterized by the production of noise a potentially appropriate location for them could be on the lands that will be restricted from other urban uses at the northerly part of the new community site by virtue of anticipated high noise levels from the airport.

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This map illustrates the Duffin River watershed, showing the river's course and its tributaries. The river flows from the north towards the south, eventually emptying into Lake Ontario. Key tributaries include Little Rouge Creek, West Branch Creek, Trout Brook, and Rouge River. The map also shows 'Routages to East Duffin Creek' and 'Routages to Petrol Creek'. The watershed is divided into sections labeled I through IX. The bottom right corner indicates 'LAKE ONTARIO'.

SOURCE:
Environmental Terrain Study
Terra Scan Limited, Jan. 1973

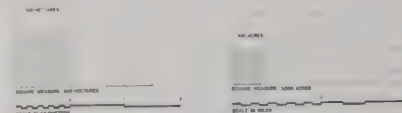
Figure 1: Schematic representation of the experimental design. The figure is divided into two main sections: 'Pretest' and 'Main Experiment'. The 'Pretest' section includes a 'Pretest' box with a 'Pretest' label and a 'Pretest' box with a 'Pretest' label. The 'Main Experiment' section includes a 'Main Experiment' box with a 'Main Experiment' label and a 'Main Experiment' box with a 'Main Experiment' label. The 'Pretest' section also includes a 'Pretest' box with a 'Pretest' label and a 'Pretest' box with a 'Pretest' label. The 'Main Experiment' section also includes a 'Main Experiment' box with a 'Main Experiment' label and a 'Main Experiment' box with a 'Main Experiment' label.

North Pickering Community Development Project

■ SLOPES GREATER THAN 10%
 ■ HIGH GROUND WATER TABLE
 ■ DRAINAGE SLOUGH

SOURCE:
 Environmental Terrain Study
 Terra Scan Limited, Jan. 1973

NATURAL PHYSICAL CHARACTERISTICS



LAKE ONTARIO

plantown
 consultants
 limited

North Pickering Community Development Team
 Ministry of Treasury, Economics and
 Intergovernmental Affairs

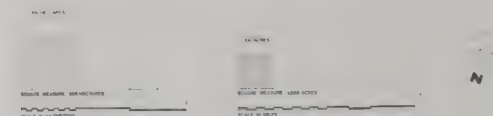
EN
 2

North Pickering Community Development Project

MAJOR FOREST RESOURCES
ENVIRONMENTALLY SIGNIFICANT AREAS
FOR WILDLIFE AND NATURAL HABITATS
CONSERVATION AUTHORITY LANDS

SOURCES:
Map of Environmentally Significant Areas
Toronto-Centred Region
Regional Planning Branch
Ministry of Treasury, Economics and Intergovernmental Affairs, April, 1972
Map of Forest Resources Inventory, 1959
Former Ontario Department of Lands and Forests

FOREST RESOURCES, WILDLIFE AND NATURAL HABITATS














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EN
3

North Pickering Community Development Project

-  SAND AND GRAVEL PITS
-  GENERALIZED OPEN SPACE CONCEPT
-  POTENTIAL 100+ COMPOSITE NOISE RATING AREA
-  POTENTIAL 95-100 COMPOSITE NOISE RATING AREA
-  SITES OF ARCHAEOLOGICAL SIGNIFICANCE (preliminary designation)
-  BUILDINGS OF ARCHITECTURAL INTEREST (preliminary designation)
-  BUILDINGS OF SPECIAL ARCHITECTURAL SIGNIFICANCE (preliminary designation)
-  EXISTING HYDRO LINES
-  EXISTING OIL PIPELINE
-  PROPOSED SANITARY LANDFILL SITES
-  PREFERRED 500 K.V. HYDRO LINE ROUTE

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EXISTING AND POTENTIAL MAN-MADE CHARACTERISTICS

SCALE: 1:50,000
 NORTH ARROW

SCALE: 1:50,000
 NORTH ARROW

planning
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 Ministry of Treasury, Economics and
 Intergovernmental Affairs

NORTH PICKERING
COMMUNITY
DEVELOPMENT
PROJECT

TRANSPORTATION BACKGROUND PAPER NO. 1:
FACTORS AFFECTING TRANSPORTATION
PLANNING FOR THE NEW COMMUNITY

NORTH PICKERING COMMUNITY DEVELOPMENT TEAM
MINISTRY OF TREASURY, ECONOMICS AND INTERGOVERNMENTAL AFFAIRS

PLANTOWN CONSULTANTS LIMITED
SEPTEMBER 1973

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A. BACKGROUND ON REGIONAL TRANSPORTATION PLANNING PROCESS

Many studies are proceeding and a large number of governmental agencies are directly and indirectly involved in planning ground transportation systems in the region covering Metropolitan Toronto, the Lakeshore urbanized area to the east, the North Pickering Community, the proposed Airport, and York Region.

The *GROUND TRANSPORTATION TECHNICAL COORDINATING COMMITTEE* (GTTCC) has the responsibility for determining the ground transportation impact and access requirements of the Airport, and for identifying the travel corridors of regional significance within the New Community. The decision to form the Committee was based on the policy that transportation systems developed for the area must be integrated and must accommodate local, regional and provincial travel needs along with airport access requirements. Membership includes the Provincial Government, Federal Government and the municipalities.

The Committee is directing a working team which currently is developing some total transportation concepts (roads, transit, rail and airport systems) which could satisfy needs for the year 2000. The team is made up of planning staff from the Federal Ground Transportation Unit and from the Planning Division of the Ministry of Transportation and Communications.

The *TORONTO AREA REGIONAL MODEL STUDY* (TARMS) of Systems Planning Branch, MTC, provides information to GTTCC. The Model has the capability of identifying demand levels for various road and transit configurations for the Region.

THE RAILWAY RELOCATION COORDINATING COMMITTEE is concerned exclusively with the problem of relocating the Canadian Pacific Havelock Subdivision which presently passes through the Airport site.

The *TORONTO AREA AIRPORTS PROJECT* (Federal) is conducting extensive studies on its own of a number of Scenarios for the proposed Airport. These differ with respect to the relative roles taken by the new Airport and Malton and, consequently, on the number of persons using or employed in the proposed terminal. An independent Board of Examiners has been set up by the Federal Government to investigate the role and rate of growth of the proposed Airport.

The *TORONTO COMMUTER RAIL STUDY* report to the Canadian Transport Commission was published in November 1972. Because the study was well under way when the announcements were made regarding the Airport and the North Pickering Community, access to these developments was not included

in the criteria used to choose lines for detailed analysis. However, the findings of the study have application to the whole question of commuter rail systems serving the New Community.

A multi-disciplinary feasibility study has recently commenced for locating an Intermediate Capacity Transit route serving the northeast corridor of Metropolitan Toronto (*GO-URBAN STUDY*). Specific Terms of Reference are currently in preparation, but in studying alternative alignments in the northeast corridor it is clear that the emphasis is to be put on routes extending from about the easterly terminus of the Bloor-Danforth Subway to Malvern. An analysis will also be made of possibilities for extending the preferred route(s) onwards to the North Pickering Community and the Airport, and to the core of Toronto. While scheduling details have yet to be worked out, it is likely that the study will last 24 months.

B. CURRENT STATUS OF REGIONAL TRANSPORTATION PLANNING

Preliminary data has been produced on regional travel estimates in 2001. This includes travel generated by the New Community as well as the Airport and other developments. Because of significant airport access requirements attention is now being given by the GTTCC to the opportunities for decreasing roadway needs by improving regional transit and rail service and by processing airport passengers in off-site locations. The implications for the Community resulting from the long-range regional plan will be most significant, but it is thought that it will not be until about the end of the year that a much firmer picture will be had of the overall scheme for ground transportation facilities.

A detailed inventory of the existing road network has been made by the GTTCC and the five-year construction programs of the Ministry of Transportation and Communications and the municipalities have been compiled. This has been done primarily to help define the construction program for Airport opening date and, again, there will be implications with regard to regional service to the New Community and the character and siting of initial development. Obviously, coordination of effort will be mandatory.

The Railway Relocation Coordinating Committee is well into its program and has identified and is investigating several alternatives for the relocation. At the present time the Committee is developing a comprehensive list of engineering, environmental and economic criteria to use in evaluating and comparing the alternatives. Here, too, there will be a need to integrate this work with the planning of the

New Community. The ultimate decision must take account of the particular requirements of North Pickering Community for development of proper regional railway links to permit sound growth of its economy.

Map TR1 indicates the current situation with respect to the planning of regional transportation facilities. Potential routes are presented for discussion purposes only and locations are approximate.

a) Highways

Existing freeways are #401, the Gardiner Expressway to the Don Valley Parkway, the Don Valley Parkway to #401. Major highways are #2, #7, and #48. Present plans of the MTC call for the extension of the Don Valley Parkway as Highway 404 to the north.

The route for Highway 407 has now been fixed easterly to Highway 48. One option is that east of this point it would traverse the Community near to the Airport boundary.

The East Metro Freeway would provide access to the Airport and the New Community and could also serve recreational traffic as part of the Provincial system. The GTTCC is also considering another route along the Brock Road corridor within the Parkway Belt on the east boundary of the Community.

The Gardiner Extension is under review and some alternative concepts are being evaluated.

Not shown on the map is a proposal which was studied by the MTC to connect the Oshawa-Whitby area to #407 with a north-south freeway. This was found not warranted at this time.

An important part of any ultimate scheme would be to build a local service Airport Ring Road (not shown) to compensate for the severance or loss of local community roads falling within the Airport property.

b) Relocation of CP Havelock Subdivision

The section of the Havelock Subdivision to be removed from the Airport property is indicated by a dotted line on the map. The replacement for this might be in service by the end of 1977. The alternatives are Lines A, B, and C. Evaluation and comparison of these is expected to commence shortly.

c) Commuter Rail Service

Commuter rail service into Metropolitan Toronto could be provided by way of the CP Havelock Subdivision (relocated as suggested above), or by the CP Belleville Subdivision. Both lines join near Agincourt and enter North Toronto Station on Yonge Street beside the Summerhill subway station. The Belleville Subdivision was one of the four investigated in detail in the recent Toronto Commuter Rail Study, but only as far as Malvern.

The section between Agincourt and Leaside Station is the most heavily used of all CP lines in the country. Insertion into the system of any serious level of peak hour commuter service would require very heavy capital investment, possibly involving construction of another track to separate the service from freight and long-distance passenger trains.

Some other suggestions are, starting at Union Station, to use various combinations of Canadian National and Canadian Pacific trackage, some abandoned right-of-way, and the East Metro Freeway corridor into the Airport. The same problems exist here as with the Belleville Subdivision.

d) Intermediate Capacity Transit (GO-URBAN)

The approximate study area is shown on the map. Several alternative routes within the corridor are to be identified and evaluated. As stated previously, studies will be made of the possibilities for extending the route to the New Community, the Airport and the core of Toronto.

From this brief review it will be apparent that a great deal of thought and effort is being given to the development of transportation systems for the overall region. Unfortunately, from the North Pickering Community's point of view no clear total picture has yet begun to emerge as to what form the long-range plan may take and, consequently, how it will effect and be affected by the Community. The situation is critical because the transportation systems developed for the Community Plan can be properly evolved only in a regional context. The economic strength and vitality of the Community obviously will be as much related to the nature and location of its transportation links to the surrounding urban region, as to the skills available in the labour force or the quality of serviced industrial land. The same applies to questions of access to centres of education, recreation, shopping and so on. Regrettably, if understandably, the internal and regional links required for the Community are not in themselves of sufficient magnitude to force the issue in favour of any particular

regional mix of highways, rail and transit. Understandably, too, there are many problems associated with the function of the Airport and means of access to it, as well as problems pertaining to the growth of the Central Ontario Region as a whole. Nevertheless, the schedule for development of the Community Plan makes it imperative that the options be narrowed down and that several alternative concepts for the regional system be evolved as quickly as possible. These concepts must be evolved with equal consideration given to the specific needs of the New Community as to the Airport and other projects.

C. SOME OPTIONS FOR TRANSPORTATION PLANNING

The existing variation in the degree of commitment to regional transportation facilities serving the North Pickering Community, the rate at which transportation technology is advancing and the degree to which changes are occurring in public attitudes and desires with respect to various modes of transportation all imply a substantial range of options for transportation planning in the New Community.

As point of departure for further discussions in this area several of these are presented herein.

1. Reduction in the Need for Auto and Transit Travel

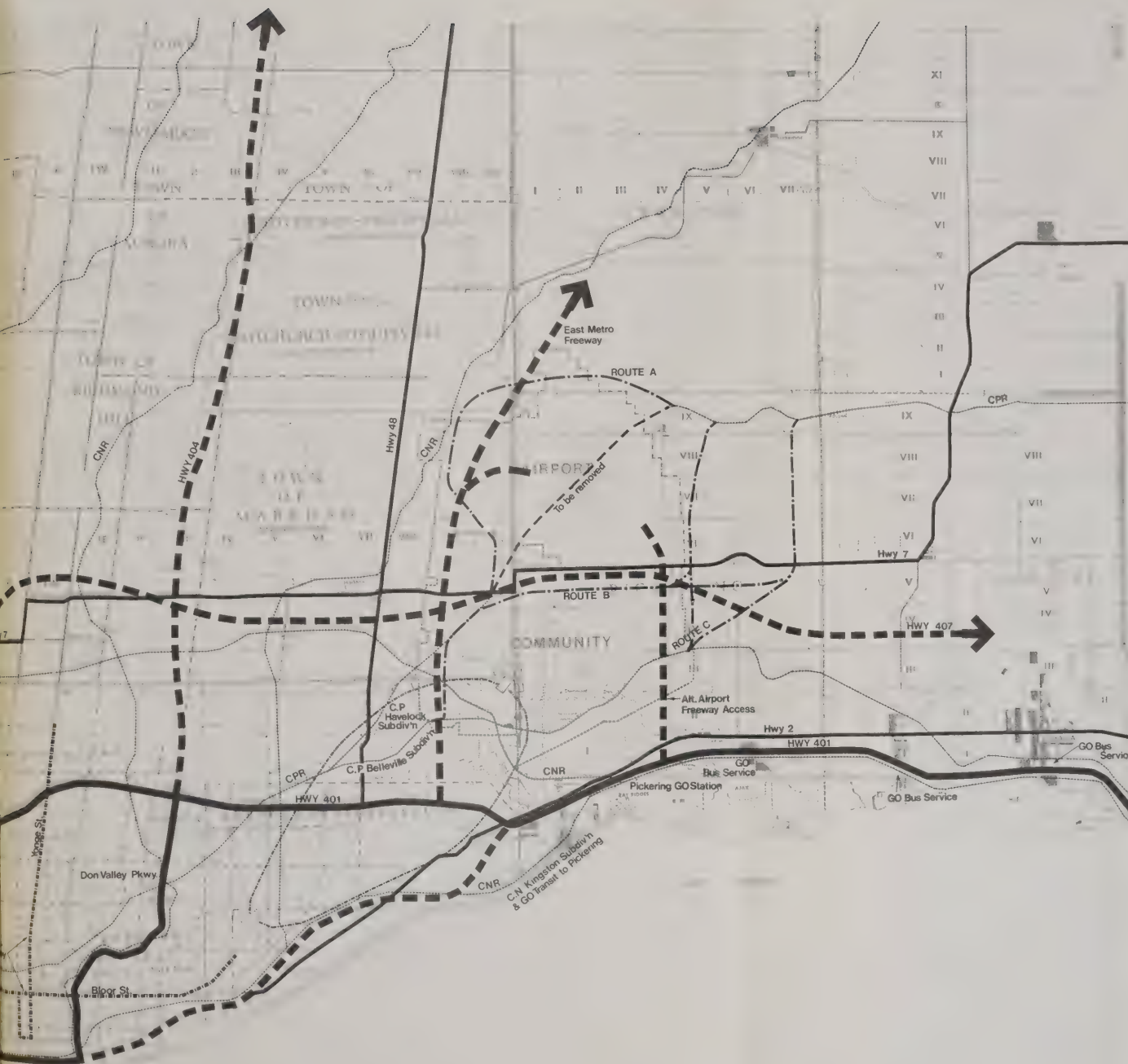
Much can be achieved by encouraging pedestrian movements and reducing travel distance through concentrating land use activities and juxtaposing those activities which are particularly strongly interrelated.

2. Reduction in the Role of the Auto and Increase in the Use of Transit

There is a good chance of doing this by attempting to restrict car ownership by the residents. Even if this were politically acceptable it would not take into account the large number of the residents who have to travel throughout the day to other parts of the COR region, and will wish to make recreation and social trips on an ever-increasing scale; regional rail or transit services will be suitable in only a relatively small portion of these trips. Also it would be unfair to the residents because it would be impossible to prevent outsiders from using their cars within the Community.

Another approach might be to tax drivers according to the use they make of the road system. While the technical means of doing this are probably now close at hand, it is obvious that such a step cannot be taken only in one very small sector of the entire Province.

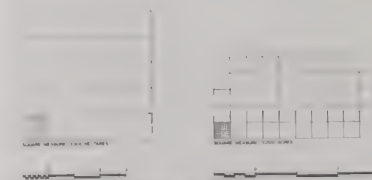
North Pickering Community Development Project



- EXISTING HIGHWAY
- POTENTIAL HIGHWAY CORRIDORS
- EXISTING RAILWAY
- RAILWAY TO BE REMOVED
- ALTERNATIVE RAILWAY RELOCATION ROUTES
- EXISTING SUBWAY
- GO-URBAN STUDY AREA (Intermediate Capacity Transit)

SOURCES:
Ministry of Transportation and Communications
Ground Transportation Technical Committee
Railway Relocation Co-ordinating Committee
Metropolitan Toronto Transportation Plan Review
Toronto Transit Commission

EXISTING AND POTENTIAL TRANSPORTATION FACILITIES



It would be unwise to contemplate building an inadequate, minimal roadway system on the theory that automobile use automatically will be discouraged. There seems to be little evidence that this in fact happens, and in any event the provision of a proper level of roadway service is an essential part of permitting the Community to grow and develop soundly. Roads are a fundamental part of its fabric, and even if it were assumed possible to remove a large number of automobiles there still must be allowance made for such things as door-to-door deliveries, the operation of construction vehicles, taxi services, on-street transit services, school bus services, and ambulance and other emergency services.

The main concern is with the way automobile travel for work and business concentrates into a few hours during the morning and evening. The design of a new town presents an unique opportunity to approach this problem in positive manner. The excessive use of the automobile at these times can be attacked first of all, and perhaps most fundamentally by concentrating land uses and mixing them in ways that diminish the need for non-pedestrian travel and encourage travel on foot. (Perhaps the overall need for travel may be lessened by the introduction of special audiovisual communications systems; however, there is some doubt as to whether the effectiveness of these systems in this respect will be all that is being claimed).

Secondly, the attractiveness of public transit can be materially increased by providing exclusive right-of-way; by designing roadways with special lanes for transit use all day or during peak hours; by introducing dial-a-bus services in areas unsuitable or not yet dense enough for scheduled services; concentrating mixtures of land uses close to transit routes so that several markets can be taken care of by a single line; keeping walking distances for the majority of potential users to less than 1000 feet; providing comfortable, weather-proof shelters at transfer points and reducing waiting times; electronic and communication aids to help maintain high frequencies and short travel times; designing direct transit routes connecting major land uses and making the roadways less direct; and finally, by recognizing that there is no single form of technology capable of efficiently and economically meeting the many and diverse requirements for transit service in the Community - a whole array of proven technologies will have to be introduced, with each system put into its proper place in the overall scheme of things.

3. Reduction in Congestion by Staggered Work Hours and Shorter Work Week

Such changes will not greatly reduce the relative use of the auto and public transit for work and business but they may reduce the level of congestion on streets and in transit vehicles during rush hours.

The extent to which staggered work hours can be introduced will depend on the character of businesses and industries attracted to the Community, and the degree to which individuals and firms have need to communicate directly with each other. The effect of the shorter work week will be felt most in the added leisure time available and the way this generates more social and recreational travel. We may not be too far away from a period when the problems caused by social and recreational automobile travel will match the rush hour problem of today.

4. Accommodation or Reduction of Through Traffic Movements

The Community is interposed between the Airport plus a potential Industrial Zone of some magnitude in the noise lands between it and the Community, and Metropolitan Toronto, York Region, and the Whitby-Oshawa area. Both the Airport and the Industrial Zone will generate heavy volumes of trucks and automobiles with the rest of the region. Regardless of the extent and orientation of the regional freeway and major highway system many of these trips will be attracted to the arterial road system in the Community, partly because these provide more direct travel, and partly because of congestion on the major routes.

The alternatives are: to accept the situation and in designing the arterial system make due allowance for through trips; to provide some special routes which pass through the Community from one side to the other and have no connection with its road system; and to develop an arterial system sufficiently discontinuous to discourage through movements, but not to the extent that difficulties are created for internal trips or for trips between the Community and adjacent areas. Perhaps the best solution will be some combination of the three alternatives.

NORTH PICKERING
COMMUNITY
DEVELOPMENT
PROJECT

SERVICES, UTILITIES AND COMMUNICATIONS
BACKGROUND PAPER NO. 1:
FACTORS AFFECTING PLANNING

NORTH PICKERING COMMUNITY DEVELOPMENT TEAM
MINISTRY OF TREASURY, ECONOMICS AND INTERGOVERNMENTAL AFFAIRS

PLANTOWN CONSULTANTS LIMITED
SEPTEMBER 1973

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A. OPPORTUNITIES AND CONSTRAINTS

The site of the proposed community is relatively free of existing services and utilities networks and is thus not subject to the usual variety of constraints affecting new development.

The technology exists to create ultra-modern services and communications networks for the new community. Selection of the best or most desirable systems will require consideration of a number of questions such as:

- a. What will the public of the future desire?
- b. What is an acceptable cost for new systems in relation to difficult to measure benefits?
- c. How will the systems be managed?
- d. Can systems be integrated with existing networks outside the community?

Although these questions must be answered before implementation, the community must be planned in a way that allows for the most economical and acceptable provision of traditional services and utilities and also be sufficiently flexible to accommodate provision of new systems either initially or in the future.

There are several major physical factors affecting community design, and these are briefly discussed below.

1. Central York-Pickering Servicing System

A major provincial scheme presently under study is to provide sewer and water services to the proposed North Pickering Community, the airport, a large portion of York Region north of Metropolitan Toronto, and the southern Pickering area.

Because the system is planned to serve such a large area, its design, while considering the proposed community, must proceed somewhat independently of it. The timing of its implementation is such that the planning of the new community will follow the regional servicing planning and therefore must work within certain constraints imposed by it as to location.

2. Trans Northern Oil Pipeline

The existing Trans Northern oil pipeline presents a specific locational constraint to proposed development. The nature of the constraint imposed by the pipeline is mainly that of not being able to build structures on the existing 60 foot right-of-way.

The options for dealing with the pipeline are to (1) maintain its present alignment and plan the community to accommodate it; (2) relocate the pipeline to a suitable corridor either through the site or around it; (3) maintain the basic alignment but relocate minor sections to accommodate the desired community plan.

3. Existing and Proposed Hydro Lines

A variety of major and minor electrical power lines traverse the project site.

A major power line (Gatineau) generally forms the southern boundary of the proposed community. The Cherrywood transformer station on this line is the focal point for several other lines. The line to the Pickering generating station runs southerly, and the Finch line runs to the west. Another line runs north to a line which follows the Trans Northern oil pipeline. Apparently this line could be relocated if desired. Another line runs east along the Gatineau line then cuts north-easterly through the Pickering golf course.

Presently under study is the 500 KV Nanticoke to Pickering major transmission line. This line must tie into the Pickering-Gatineau system somewhere near the Cherrywood sub-station. The proposed line will probably be a constraint on the development and planning must reflect this proposal.

Criteria relating to development proximate to power lines is to be provided by H.E.P.C. Similarly, the results of the deliberations of the Solandt Commission concerning the 500 KV system are awaited regarding its effects on the community.

4. Sanitary Landfill Sites

Sanitary landfill sites proposed in and adjacent to the project site will influence the planning of the community. The final use of landfill sites may be greenbelt or recreational land. However, during the active land-filling operation which could last from 10-20 years, the development plan must consider the effects of such operations on the surrounding community.

The landfill sites may be available for use by the North Pickering Community for waste disposal, at least initially, and possibly for a long period of time depending on the process determined for solid waste disposal.

5. The Airport

The proposed location and physical extent of the new airport will impose a variety of constraints on the servicing networks for the new community. One example is the controls that will be established regarding the location and type of communications facilities within various degrees of proximity to the proposed airport.

6. Pickering Nuclear Generating Station

The proximity of the Pickering nuclear generation station might offer opportunities for considering uses for waste heat.

B. OPTIONS AVAILABLE:

1. Opportunity for Technological Innovation

Items under consideration incorporate a review of conventional materials and methods as well as a consideration of the broadest aspects of innovation.

a) Services

Services include sewers, water, and solid and liquid waste disposal. Consideration of the placement of services covers location in roads, easements, utility corridors, common trenches, utilidors, greenbelts. The compatibility of different systems and required physical separations is a factor. Materials considered include concrete, steel, iron, asbestos, cement, plastics, and combinations thereof, depending upon proposed use and application.

In addition to the physical specifics of materials and locations, the broader question of processes is under review as to water conservation and re-use, and sanitary sewage and storm water handling.

In the area of solid waste disposal, a variety of considerations arises such as solid waste collection by trucks, collection by pneumatic transport, grinding of organics and disposal to sewers, processing and reclamation for material re-use, separation and burning for energy, and landfill operations.

b) Utilities

Utility systems involving heat and energy such as electric power, oil, and natural gas are subject to similar physical considerations as apply to services, such as underground vs. overhead, on street, front or rear yard easement, utility corridors, greenbelts, and so on. In addition to physical factors, the potential uses of power are increasing such as heavy load requirements for transit vehicles, recharge centres for battery-driven vehicles, and expanded uses for snow melting on sidewalks and roadways. The source of electrical energy could be entirely from Ontario Hydro or could be partially generated internally by burning refuse.

The nature and extent of the use of oil and gas in the community also presents a range of possibilities including whether gas lines will go everywhere in the community or be confined to special use areas such as major industrial sectors. Similar to other systems, the location of gas mains with respect to other utilities, and the method of management and operation of the systems offer several possibilities.

Again, not only do the specific physical aspects of the several utilities present options but also different procedural systems and overall approaches, such as community heating and cooling from a central facility.

c) Communications

The new community could encompass a greatly expanded use of telephone systems including telemetering for such uses as meter reading, surveillance, and computer links. Cable television systems will permit new services, such as direct home linkups for mail, shopping, teaching, and recreation uses. A great opportunity exists for innovation in these areas.

2. Systems Operation and Management

Approaches by which these systems can be combined and co-ordinated embracing all or combinations of the services, utilities and communications networks with respect to their operation and management also present various possibilities. This could involve a single utility organization, an overall commission to co-ordinate individual utility companies, a private utility company specifically for the community, or at least a degree of common metering and billing related to currently existing administrative mechanisms.

NORTH PICKERING
COMMUNITY
DEVELOPMENT
PROJECT

COMMUNITY DESIGN BACKGROUND PAPER NO. 1:
PRELIMINARY OUTLINE OF OPTIONS FOR
THE PHYSICAL DESIGN OF THE NEW COMMUNITY

NORTH PICKERING COMMUNITY DEVELOPMENT TEAM
MINISTRY OF TREASURY, ECONOMICS AND INTERGOVERNMENTAL AFFAIRS

PLANTOWN CONSULTANTS LIMITED
SEPTEMBER 1973

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A. SCOPE OF PHYSICAL DESIGN OPTIONS

The Plan for Development of the New Community will emerge in response to the complete spectrum of social, economic and physical perceptions developed by the project team. It is perhaps safe to say that the greatest range of options will be available in the way in which those factors become expressed in alternative community designs. This will involve consideration of such matters as:

1. possible arrangements of land use patterns with respect to the degree of concentration, dispersal, separation or mixing of residential, commercial and industrial uses;
2. appropriate road networks in relation to land use patterns and the degree of provision for pedestrian, bicycle, transit and vehicular movements;
3. alternative patterns of distribution of facilities for educational, spiritual, cultural, entertainment, recreational or other social and community services;
4. the balance to be achieved in the provision of open space for active and passive recreational use in relation to the natural features of the site and variations in distribution patterns of employment and housing; and
5. the merging of all factors into a physical design expression that is an appropriate reflection of the anticipated goals, objectives and life styles of the future inhabitants of the New Community.

Three of the more important areas which are relevant to this range of considerations are: housing, shopping and urban form. Some of them are outlined in the following sections. They will be presented in a more comprehensive manner in a subsequent paper as a prelude to the presentation of the Preliminary Community Design Concepts.

B. HOUSING OPTIONS

The options to which attention must be paid in addressing the matter of housing in the formulation of the Plan for Development are myriad. They include such matters as the following:

1. Housing mix as it relates to the proportion of housing to be provided in single and semi-detached units, low-density at ground multiple family units, moderate density ground related multiple family units and high density apartments;

2. Conditions of tenure and the possible variations in ownership patterns including individual ownership, mutual ownership in the form of condominium or co-operative units, lease-hold arrangements for dwelling units and composite arrangements involving the ownership of the dwelling and the leasing of the land upon which it is situated;
3. The division of responsibility for housing construction in terms of private and public sector involvement and the extent of non-profit, full recovery or subsidized housing;
4. The responsiveness of housing in quantity, quality and design to variations in socio-economic characteristics of the population and their stage in their life cycle; and
5. The degree to which housing will reflect innovation in social, economic, design or technological terms.

C. OPTIONS FOR THE PROVISION OF SHOPPING FACILITIES

Changes in approaches to merchandizing on the one hand and shopping habits of consumers on the other have resulted in dramatic changes in the manner in which the shopping function is accommodated in urban centres and expressed in physical terms. As with housing, the options are numerous. Of an extensive list under consideration perhaps some of the more important at the macro level are as follows:

1. The degree to which the provision of shopping facilities should occur as a result of preplanning and initiatives in the public sector or should emerge entirely in response to the market and private sector initiatives.
2. The degree to which shopping should be regarded as an appropriate companion function to other public community services and the attendant need to provide for lesser or greater degrees of integration of multi-purpose facilities of which shopping might occupy a position of only little importance;
3. The degree to which provision should be made for lesser or greater degrees of influence on the provision of shopping facilities by rapid advancements in communications and computer technology with the potential of establishing entirely new approaches to highly centralized highly automated shopping operations;

4. The relative appropriateness of utilizing shopping facilities for a variety of social purposes such as facilitating interpersonal encounters or the exposure of larger segments of the population to specialized cultural or entertainment facilities that they might not otherwise be brought into contact with; and
5. The degree to which the provision of shopping facilities should be structured according to some hierarchical organization of the community. Contrarily, should shopping be disposed in a completely independent even random manner.

D. URBAN FORM

1. Geometrics

Urban form is not a willful geometric abstraction. It is determined conjunctively by the natural environment and by human purposes and means. These determinants are immensely complex and varied, and that is why San Francisco is unlike Sangimignano, why Columbia is unlike Cumbernauld and presumably why Pickering is unlike Peking.

Community form is not static in time or in expression. It does not exist in splendid isolation, belted in a chlorophyll corset greenbelt, but is a fascinating interacting component of the larger region, of which it is but a segment.

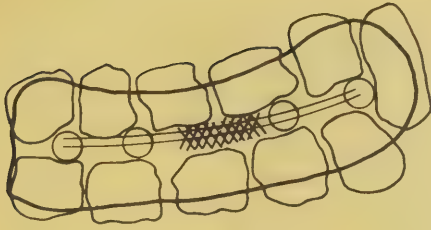
Although its body spiritual may be essentially social, the community is of the earth earthy because it is, among other things, a built form, and so physically, urban shapes emerge. Whether the physical form is or should be totally accessible to design is a matter of considerable uncertainty.

Figure 1 indicates a few of the configurations that urban form may take. These forms may be properly contemplated only as the resultants of man/nature decisions. If regarded as predetermined form-fixing propositions to be achieved independent of valleys, streams and trees and independent of working, playing, learning, shopping and moving about, they become as indefensible as Procrustes' attempts to match his visitors via the rack to the geometry of his bed.

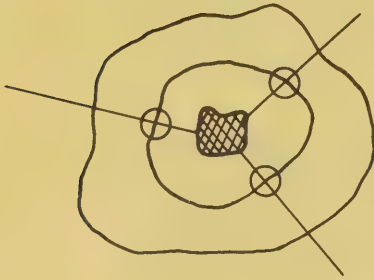
2. Spatial Distribution

In addition to matters of overall community geometry, there are options concerning the spatial distribution within the urban form. Figure 2 illustrates 3 alternatives wherein the urban fabric is concentrated, dispersed or clustered.

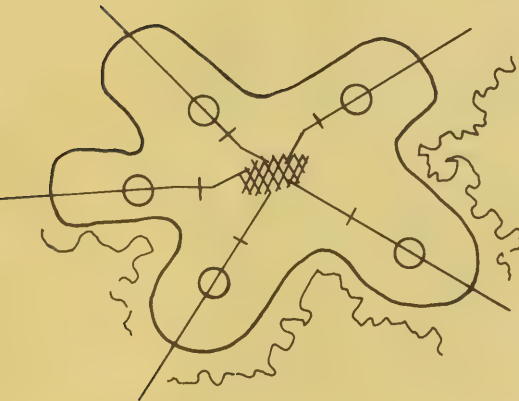
ALTERNATIVE URBAN FORMS



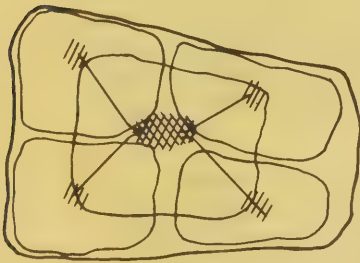
LINEAR organized along a spine incorporating major shopping, commercial, social, recreational, cultural and institutional elements of the community and including transportation, communication and servicing provisions.



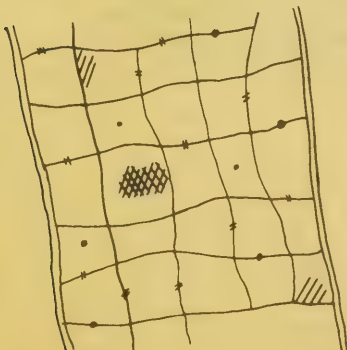
CONCENTRIC growth and development outward from a central core.



FINGER recognizes radial attraction of central functions and intermeshing of urbanized and natural environments.



NODAL involving possibly both central and sub-central concentrations of urban functions including higher density residential configurations.



GRID a relatively uniform distribution of urban functions across the network of an equalized circulation pattern resulting in an open-ended and flexible community structure.

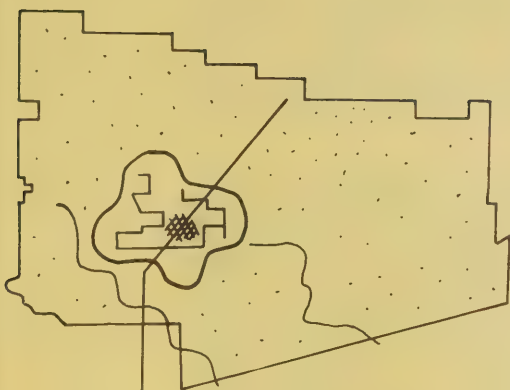
If concentrated, there is a consequent salutary increase of lands left in a largely natural condition. The trade-off takes the form of a higher density community and in particular, of a more intensive residential environment, characterized by multiple housing forms. If dispersed, the opposite conditions pertain, - the undisturbed natural environment becomes minimal, but the community is contrived at gentler densities. It might be safe to generalize that in the residential precincts visual, acoustical and territorial privacy would be increased. It would be profitable to explore quite thoroughly the attributes of these two divergent spatial ideas, - concentration and dispersal. Perhaps the best of both worlds might be within reach.

3. Urban Residential Structure

Among new and not so new town forms, a constant theme predominates from Harlow to Radburn, to Faarsta, to Chandigarh, to Columbia, to the Mills both Don and Erin. It is the idea of some sort of primary social cell as the basic physical community or town organizing device. Distinguished urbanists and social observers from Fredrick Osborn and Lewis Mumford to Clarence Stein, Henry Wright and Clarence Perry have extolled the neighbourhood idea. But there are many who question the whole idea as to PTA, too parochial, too out of touch with emerging life styles; in short, an idea whose time has passed. Yet in North Pickering terms, in the Social Development Papers, the search for such a human scale of social and physical validity is evident. The Parkway Belt's justification is "to define and separate communities and thus to provide people with a sense of community". This is an expression of the same cellular proposition farther up the scale of complexity leading from neighbourhood to district (a constellation of neighbourhoods), to overall community (a constellation of districts). And vigorous life animates Columbia's neighbourhoods, while the first interesting stirrings of neighbourhood-scaled activity already animate the early beginnings of Erin Mills.

Yet Hooke or Milton Keynes or to some degree Cumbernauld, have taken a different attitude to social and physical structuring of the town. Thus the validity or invalidity of the cellular approach, whatever its hierarchial couplings may be, is a prime question the answer to which must make a major contribution to the urban form of the new community.

SPATIAL DISTRIBUTION of URBAN FORMS



CONCENTRATED PATTERN



DISPERSED PATTERN



CLUSTERED PATTERN

The last three pages of sketches attempt to set out visually in broad and probably over-simplified fashion these issues. As a beginning, Figure 3 illustrates the conventional or classic neighbourhood unit theory which has survived in various forms from Perry's first formulations fifty years ago.

Figure 4 shows the almost biological evolution of the cellular residential structure from precinct to neighbourhood to district to community and on to larger implications of regional urban form. This hierarchy raises considerations not only of the appropriateness of the neighbourhood idea, but also of the parallel social and physical rational nature of district (sub-community) and community. In the opposite direction of growth from the neighbourhood, there are the smaller units in decreasing order of precinct and eventually of individual buildings. Here questions of territoriality or "defensible space" as explored by Oscar Newman and Robert Somers arise.

Figure 5 presents some indication of how the four basic configurations, - precinct, neighbourhood, district and community, may be contrived in various combinations, each presumably with strengths and weaknesses. The sketch also notes the possibility of a homogeneous undifferentiated and largely non-structured urban form. The prospect of this latter idea for 250,000 people is perhaps worrisome.

In all this, it could be argued that design concepts might better start at the microcosm of precinct and neighbourhood, rather than at the impressive dimensions of total community form.

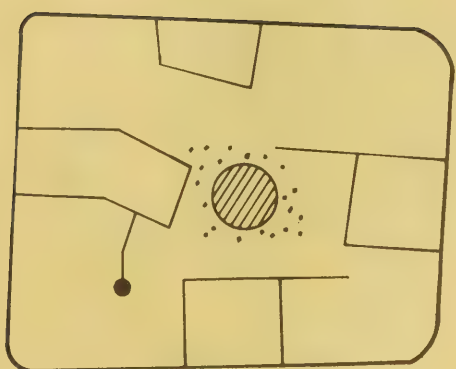
It might be in order to conclude these notes, which have perhaps been all too preoccupied with urban and cellular community structure, with the cautionary note that many perceptive and experienced sociologists and social observers have stressed the idea that the deterministic link between physical environments and social behaviour can too easily be exaggerated by planners and architects. Maurice Brody, the distinguished British sociologist, reminds us that neighbourhood structure does not ensure neighbourliness.

CONVENTIONAL or CLASSIC NEIGHBOURHOOD THEORY

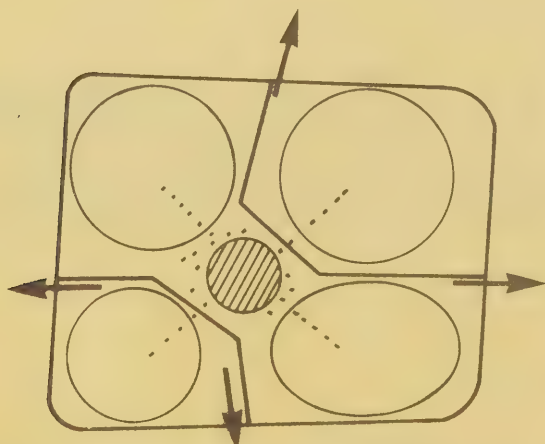
- 1. frequently elementary school centred
- 2. size determined by elementary school; currently approx. 4,000 to 5,000 p. or 1,000 to 1,500 d.u.
- 3. defined boundaries (natural or man-made) to enhance identification
- 4. neighbourhood usually focuses around elementary school , neighbourhood park , corner store , child care and neighbourhood building



- 5. vehicular circulation system involving collector streets and residential streets
- 6. through or extraneous traffic does not penetrate the neighbourhood
- 7. pedestrian circulation system connects internally to the neighbourhood destinations (school, park, corner store, nursery) and externally to public transit, adjacent neighbourhoods and other external destinations
- 8. a diversified range of dwelling types



no internal collector

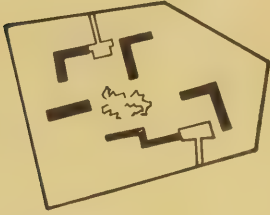


discontinuous collector

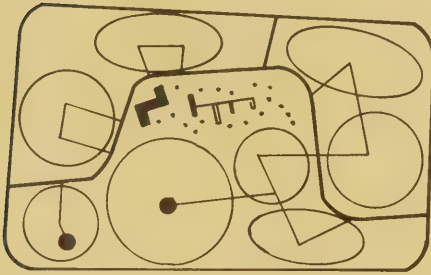
ALTERNATIVES

Figure 3

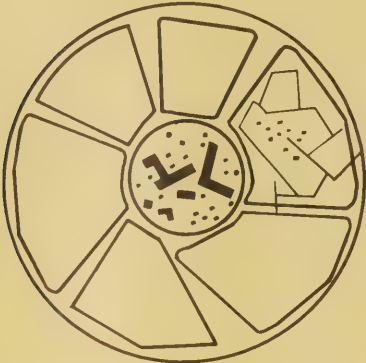
CELLULAR URBAN RESIDENTIAL STRUCTURE



1. **PRECINCT** a modest sized group of dwellings, possibly with shared facilities and spaces. Socially and physically the smallest design component involving perhaps 100 units or 3 to 4 hundred persons.



2. **NEIGHBOURHOOD** 1000 to 1500 dwellings or 4000 to 5000 persons, usually grouped about appropriate social recreation, educational and child care facilities



3. **DISTRICT** clusters of 10 or 12 neighbourhoods, or 35,000 to 50,000 persons, about a sub-centre including major shopping, secondary and post-secondary education facilities, district wide social-recreational-cultural provisions, library and church components and multiple residential environments



4. **COMMUNITY** a constellation of districts surround the community or town centre. At the centre are located regional shopping, major educational institutional cultural and recreational activities and higher density residential configurations



5. **THE REGIONAL URBAN FORM** the Parkway Belt is intended to define and separate communities thus enhancing community identity

Figure 4

CALL NO:

JR:

RN 328

X

TITLE:

North Pickering
Community Development
Project - Discussion
Paper no. 1

D

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VOL:

